THE AMERICAN NEPTUNE

A QUARTERLY JOURNAL OF MARITIME HISTORY



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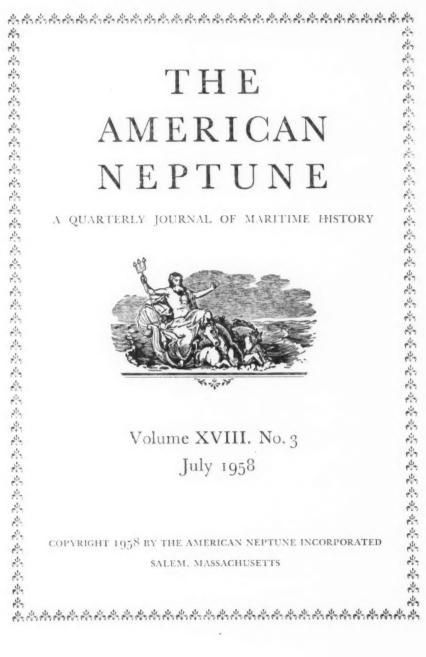
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PREVIOUS to World War II the United States Navy Department published two of the most important collections of naval documents in their archives and from other sources. The total of fourteen volumes of the Quasi-war With France and the Barbary Wars constitute a mass of original information that every maritime historian has had occasion to dig in ever since they appeared.

It is, then, with a great deal of enthusiasm that we learn that this useful project is about to be renewed. A recent letter from Rear Admiral E. M. Eller, U.S.N. (Ret.), Director of Naval History for the Navy Department tells us that: 'The U.S. Navy Department has announced plans to collect and publish the much scattered documents relating to the naval and maritime history of the American Revolution. Mr. William Bell Clark will edit the work. The Navy Department states that a major contribution to the success of the project can be made by anyone possessing or knowing of unpublished letters, diaries, reports, ship logs, and other naval documents for the years 1775-1785, and who will make such material or information available to the Director of Naval History, Navy Department, Washington, D. C. Material submitted will be on a loan and will, of course, be returned.' We hope that anyone who can be of assistance in this admirable undertaking will answer Admiral Eller's call.

It is also especially satisfying to know that Mr. William Bell Clark, one of our Editorial Advisors for many years, and the author of numer-

ous articles in this Journal, has been selected to edit the naval documents relating to the American Revolution. The selection of Mr. Clark assures us that the high standard of scholarship of the first two series will be maintained.

Many years ago we carried Ouestion and Answer columns in the NEPTUNE but as there was not sufficient material submitted they were discontinued. A recent letter from Captain John Campbell in the Canal Zone inquires 'if fifteen years is not too late to answer a query that abpeared in the October issue of the NEPTUNE in 1943,' he should like to do so. It is not too late. In that issue John R. Herbert, eminent editor of the Quincy Patriot Ledger, desired information concerning the origin of the name and use of piggin sticks. John may have long since come across the information, but if he has not Captain Campbell guotes A Naval Encyclopdia (L. A. Hamersly & Co., Philadelphia, 1881) as saying 'piggin, a little pail having a long stave for a handle used to bail water out of a boat' and again from The American College Dictionary (New York, 1952) 'piggin, a small wooden pail, a tub with a handle formed by continuing one of the staves above the rim,' so he says 'it seems that a piggin stick is the handle or stave mentioned and intended to fit on the piggin.'

As this is the 150th anniversary of the inauguration of Robert Fulton's first successful steamboat line on the Hudson River we plan to carry a Note about that event in the next issue. In the meantime this number sees the final arguments in the Bowen-Quigley controversy on the 'Origin and Diffusion of Oculi.'

ERNEST S. DODGE

Peabody Museum of Salem

Postscripts to The Search for Captain Slocum

BY WALTER MAGNES TELLER

S long as man's destiny interests man, Captain Joshua Slocum's gesture and story will hold a peculiar fascination. A Yankee merchantman and master mariner left at loose ends by the advent of steam, Slocum was 51 when, on 24 April 1895, amid modest fanfare, he set out from Boston harbor to sail singlehanded around the world. A reporter on the scene described him as 'spry as a kitten and nimble as a monkey.' His thirty-seven-foot sloop *Spray*, which he himself had rebuilt from a derelict oyster dredger, proved to be equally spry.

A southward course had been plotted but the sloop sailed eastward instead, as though both boat and passenger were reluctant to take the plunge. Hugging his familiar coast, Captain Slocum's first port of call was Gloucester, twenty miles away, where he asked himself again 'whether it were best to sail beyond the ledge and rocks at all.' He lingered six weeks in his native Nova Scotia till finally, on 2 July, he let go his hold on America. Three years, two months, two days, and 46,000 miles later, he dropped anchor in Newport, Rhode Island, the first man to have sailed around the world alone. He had a strong urge, however, to return to the place of beginning, and apparently, *Spray* did, too, for a few days later, 'not quite satisfied... she waltzed beautifully round the coast and up the Acushnet River to Fairhaven, where I secured her to the cedar spile driven in the bank to hold her when she was launched. I could bring her no nearer home.' So Slocum wrote at the end of his book, *Sailing Alone Around the World*, a masterpiece of literature of the sea.

Almost sixty years have passed since Sailing Alone was first published. Perhaps it is not too soon to say that henceforth its author must be reckoned among the shapers of the American past. Like Thoreau who simplified life by living in the woods, or Mark Twain speaking through Huckleberry Finn of the dear frontier days on the river, Slocum, writing of his foray back to sail, defined the American dream of escape to the past

from the pitiless encroachments of the present. The hut, the raft, the sloop; each was a symbol of a homemade and manageable world, and each symbol-maker a key figure in our past-seeking literary tradition. Though he pressed forward with all sails set, in imagination Slocum looked steadily behind. It was more than the fact that steam was driving the tall-masted ships he loved from the seas. Slocum stood for an attitude toward life which, like his method of navigation, was falling into disuse even while he was living it. He believed in living wholly according to his lights.

In our time, when the accent is on organized opinion and consolidated sentiment, Slocum's emphasis is more important than ever. Since World War II ended, and the new age began, this nineteeenth-century captainauthor has been rapidly gaining readers. Sailing Alone Around the World is more alive at present than when it was published in 1900. Hard- and soft-cover editions, here and in England, and half a dozen translations, are now in print. It is altogether likely that Slocum is becoming an established name with the general literary public, and that Sailing Alone

will take its place in the canon of American literature.

If appreciation of Sailing Alone increases as standardization of experience and conformity increase, if Slocum seems to speak to the condition of the crowd, then evaluation of the captain and his work is probably only beginning. Quite possibly, in days ahead, this saga of a solitary venturer, who was both traveler and besieger, will gain considerably in implication. If new generations come to know him better, read in him more than was read in him before, and derive from his actual-fantastic accomplishments, new insights into their own situations, it may be because of a growing knowledge of the details of the captain's day-to-dayness. The force of personality resides in particulars, and character in confusions and conflicts.

Apart from his self-portrait in Sailing Alone, very little was known about Slocum until 1956 when The Search for Captain Slocum, a documented biography by the present writer, was published. Inevitably, its appearance brought new data to light. And so much the better; for when in the fall of 1909, Slocum, age 65, disappeared at sea, boat, logs, letters, papers—all his treasures went with him. What remained was fragmentary; scattered documents, stray letters, buried newspaper stories, clippings, and photos; and the memories of those who had known him. As from time to time, further items turn up, they will need to be preserved, and also made available. One of the purposes of these postscripts is to do just that with the source materials so far discovered since The Search for Captain Slocum was published.

The new source materials, in chronological order, are:

- 1. A one-page circular advertisement of Slocum's first book, Voyage of the Liberdade (Boston, 1890).
- 2. A four-page holograph letter by Slocum to John W. Edmonds, New York, 3 May 1890. It tells of a voyage Slocum made in the 1870's as owner and master of the schooner *Pato*, explains a point in *Voyage of the Liberdade*, and underlines his unhappy financial condition.
- 3. A copy of a letter to Slocum from Edmonds, New York, 6 May 1890, identifying and introducing him to ship brokers and agents who may be able to help him sell his book.
- 4. Two unidentified newspaper clippings date-lined Camden, and Riverton, New Jersey, 26 May 1906: 'Capt. Slocum Held on Girl's Charge,' and 'Capt. Slocum in Trouble.'
- 5. Four snapshots of Slocum and *Spray* taken at Hempstead Harbor, New York, summer 1906, by Richard C. Burdette, and sent by Barbara Clark of Mount Vernon, New York, to the present writer.
- 6. Inscription in second edition of Voyage of the Liberdade from Joshua Slocum to James G. Slocum, Bristol, Rhode Island, 30 September 1906, sent to the present writer by the late J. Garfield Slocum.
- 7. Three photos, and a letter to the present writer (8 December 1956) of personal recollections of a meeting with Captain Slocum in 1908 by Vincent Gilpin of West Chester, Pennsylvania.
- 8. A letter (7 March 1957) by Charlotte W. Stove of the American Museum of Natural History, to the present writer, concerning the two-ton piece of coral Slocum delivered to the Museum in 1908.

The 1890 material is especially valuable for less is known of Slocum's early-middle than of his later years. The preceding year had been a turning point. In 1889, with almost everything taken from him—Virginia, his beloved first wife, dead; his fortune lost when his ship stranded and could not be saved; and finally, his profession gone, too, for there were no longer sailing ships enough to go round—Slocum, age 45, sat down in East Boston and wrote a book.

The captain, though widely read, was virtually unschooled. He never learned to spell or punctuate. Nevertheless, in businesslike prose that is sometimes humorous, sometimes moving, he told how, while sailing freights along the coast of South America, his bark, Aquidnech, took the ground and was wrecked—she was uninsured—and how, unwilling to return as a castaway, he built with a few hand tools a thirty-five-foot

¹ These first four items were obtained from Raphael Gould, director of the American Library Service.

'canoe,' which he called *Liberdade* (because launched on the day the Brazilian slaves were freed); and how as captain of that tiny craft, with his second wife and oldest and youngest sons for crew, he sailed 5,500 miles

from Paranagua, Brazil, to Washington, D. C.

After writing Voyage of the Liberdade, for this was the simple title he gave his first book, Slocum managed to have it printed at his own expense even though he had no cash at the time. Then still ignoring the middleman, he undertook to advertise and sell it himself. His dodger, a single sheet of glossy, pale-blue paper, 6 x 9½, announced: 'Capt. Slocum's Book | Press of Robinson & Stephenson, Boston | VOYAGE OF THE LIBERDADE | A Story of Sea Adventure.' Then came a line cut of Liberdade herself followed by ten crowded, undated paragraphs of commendation ascribed to a hodge-podge of periodicals and individuals.

Truth, a New York City monthly (1888-1902), was quoted first: 'It is the breeziest narrative of ocean adventure I have seen since the days of Marryatt [sic]....' The Boston Globe's reviewer said: 'Perhaps there is nothing in the realm of fact or fiction pertaining to marine adventure more exciting or absorbing than the story Capt. Slocum has prepared in a handy little volume....' The Brooklyn Eagle wrote: 'It is a capitally told story of not only a remarkable and celebrated ocean and inland voyage along this continent in a boat, but of two other ocean craft... in all which the writer's family largely constituted the governing and the passenger element....'

Sea Board described the book as 'a record of the most adventurous outing ever successfully made by man—and woman!' The New England Grocer did as well by the captain as any better-known publication.' "Voyage of the Liberdade" is a book that charms and is one which once taken up it is difficult to lay down until it is finished. . . . The Captain puts his

own striking personality into his book. . . . '

'It is an uncommonly interesting journal, so different from what I supposed such a record could be made; it is fresh and interesting as a work of imagination,' wrote Margaret P. Fenton. 'Very interesting,' were the non-committal words of Wm. F. Wharton. They were not inappropriate words, except for a promotional piece, for William Fisher Wharton (1847-1919), a Massachusetts lawyer and legislator, was also a diplomat. In 1890, he was assistant secretary of the Department of State, and as will be noted below, Slocum had applied for help from that quarter.

'I shall place it in the Library of the "Webb Academy and Home" to show students what can be done by a novice in case of need and distress...' appeared over the name, Wm. H. Webb. William Henry Webb (18161899), naval architect, and one of the two greatest shipbuilders of his time (Donald McKay was the other) founded Webb's Academy and Home for Shipbuilders. Though *Liberdade* was not Slocum's first experience in shipbuilding, he was, understandably, to a highly trained person like Webb, a 'novice.'

The final word on the little, dark-green covered book was: 'Price in Cloth, Illustrated, 176 pp. \$1.00.'

Probably job-hunting as well as bookselling took Slocum to New York. The letter below was written on letterheads of J. F. Whitney & Co., ship brokers and agents, whose offices were at 15 State Street. John W. Edmonds, the addressee, was with the firm of Hard & Rand, New York coffee importers. As a former freighter in the South American trade, Slocum may have done business with him. Be that as may be, this is the earliest, but one, of known Slocum letters. Written when he was, in effect, down and out, it exhibits nonetheless some of the captain's most durable characteristics: intense talkativeness, and also compelling reticence: a naïveté that went hand in hand with shrewdness, and the vivid talent which ten years later culminated in the writing of Sailing Alone.

New York 3rd May 1890

Dear Mr. Edmonds

Explaining Mr. Jacksons letter: The 'Pato'² was a schooner 45 tons regest—; the voyage was from Manilla to Honolulu Via, Hong Kong, Yookohoma, Kamchtacka and the Okotsk Sea, where we filled up with codfish having for outfits in the begining one splitting knife, the rest we gathered togather as we voyaged along from port to port finally meeting with the Constitution—laden with salt—from which I procured the salt necessary for the cureing of the fish that we set about catching now and which we carried into Oregon, it being the first cargo that ever entered the State—The Constitution was the 'Packet' lost at Samoa the one on which Victor first saw the light—spoken of in the 'Voyage'—V—was now 8 years old. The Pato had neither deck nor cabin when I took her as a means of retrieving a loss which occure to me through failure of a heavy House

The race at Honolulu in which the Pato won was very exciting The whole town turning out to see it—

I sold the Pato soon after for \$5000, all in twenty dollar gold pieces, ugh! if I had them now!

Now, as Mr Jackson half suspected: the Honolulians at the very first attempt to sail the Pato—which was somewhat oddly rigged—went adrift misstayed three times then let go both anchors to keep from going ashore till the land wind came and carried them clear of the rocks

The whole voyage would be quite a story

Two of my children were borne on this voyage while at Petropolanska; they

^{2 &#}x27;Pato' is Spanish for duck [Slocum's footnote]. •

were two months old when wer arrived at Oregon-4 days old when we began to take in fish

The whole voyage was a great success

The money which Mr J raised for me was to buy a small cargo of fancy woods which I traded off at Hong Kong wher I built a good cabin on the schooner and made all comfortable outfits necessary for the voyage

Yes Sir we had a stirring voyage and altogether a delightful time on the fishing grounds for every codfish that came in over the rail was a quarter of a dollar—clear—My friend Mr Jackson was formerly the manager of the house of Russel & Stur-

gess of Manilla

Pardon me for this intrusion—I thought to explain a few words only that might interest Mr Edmunds

Very respectfully etc Joshua Slocum

My Pato money was in the Aquidneck. The Brazilians will make that good to me after a while I feel shure of it!

J. S

To realize what is involved in the above, one needs a map, or globe, and a few words of explanation. In 1877-1878, with Virginia and their three children, ages about two, four and five, and a crew of sea hunters and fishers, Slocum sailed in *Pato* from Manila, where he had acquired her from a Britisher, Edward Jackson. *Pato*, halfway in size between *Pinta* and *Nina*, crossed the South China Sea, sailed thence to Yokohama, and to the peninsula of Kamchatka and Petropovlovsk-Kamchatski where Virginia gave birth to twins. Four days later, the captain and his family were on the Okhotsk Grounds, so called, fishing for cod.

It was only ten years since the United States had acquired Alaska from Russia. The newly discovered North Pacific cod banks were teeming with fish. Slocum had not brought salt enough to cure a bonanza catch. But luck was with him. In that far-off corner of the world, sailor-like, he met up with an old friend, *Constitution*, a former San Francisco to Honolulu packet of which he had once been skipper. (His first child, Victor, had been born on that vessel as she lay in San Francisco harbor.) *Constitution*, loaded with fish, was about to jettison her unused salt, but instead it was shoveled into *Pato*'s hold. In two weeks time *Pato* was loaded to her marks: 25,000 cod salted down and sails hoisted for a west coast port.³

The twins were two months old when Slocum made Portland, where he sold the fish, the first salt cod to enter the Columbia River. From Portland, *Pato* sailed for Honolulu, and there she ended her cruise of more than 8,000 miles. 'The whole voyage would be quite a story,' is one of the captain's noblest understatements. Actually, it would have made an ex-

³ Victor Slocum, Capt. Joshua Slocum (New York, 1950), p. 102.

traordinary book, though possibly of more interest today than at the time.

Long and venturesome voyages under sail were commonplace in those days. By sea and by land, speed was the coming thing. In 1872, the fictive Phileas Fogg streaked around the world in 80 days. In fact, the decade from 1870 to 1880 was the first great era of yacht racing. Thus it was a race, and not the voyage, which made *Pato*'s reputation, and enabled Slocum to sell her for gold. The captain's race, according to his son Victor's account, was an unscheduled one. In Honolulu harbor, one day, *Pato* was casting off her lines, when a sack of mail was rushed down to the wharf. The fast mail schooner had already left, but Slocum had a solution to the problem. 'Heave aboard here, and I'll take it out to her,' he ordered. The sack was handed over; the captain sailed off in pursuit. Driving *Pato* at top speed, he overtook the mail ship, blanketed her, and tossed her the sack. Looking back from his situation twelve years later, he concluded: 'The whole voyage was a great success.'

Among known Slocum documents, this letter to Edmonds is the only one to mention *Pato* and the two children born on the voyage. Slocum does not say they were twins, but a son, B. Aymar Slocum, in a letter to the present writer, so stated, and that they died in infancy:

Finally, there is the reference to the *Pato* money which was reinvested in *Aquidneck*, and lost when the latter stranded and was wrecked in 1887. Penniless in 1890, Slocum still hoped that the government of Brazil would pay for losses which he felt Brazilian quarantine officers had needlessly brought about. For three years he had been pressing a claim via various officials of the Department of State.

After receiving the letter above, John Edmonds replied by sending Slocum a letter of introduction to a New York firm of ship brokers and agents.

6th May 90

Messrs. J. H. Winchester & Co.

City Dear Sirs:

This will introduce to you Captain Joshua Slocum formerly master of the bark 'Aquidneck,' who made the journey from Brazil here in a small boat built by himself— We brought his effects up on one of the chartered Steamers

His desire is to further the sale of a little book he has written (an account of his voyage) and if you will kindly introduce him on the Maritime Exchange I think it will assist him materially.

He is a countryman of ours of whom we should be proud, there being too few of them left

Yours respectfully
John W. Edmonds

As a bookseller, Slocum did not succeed. As a money-maker, Voyage of the Liberdade failed. A witty, willful, factual concoction of the New England mind, it still waits to leave its impress on the world. In 1894, Roberts Brothers, Boston, published a second edition of 1,000 copies from Slocum's plates. No American publisher has reissued it since.

The two unidentified newspaper clippings which report on the somber experience of the aging captain in 1906, were found in John Edmonds' copy of *Voyage of the Liberdade*. It will be recalled that by May 1906, almost eight years had passed since the end of the voyage around the world. Slocum had written *Sailing Alone*, made a little money from royalties and lecturing, bought the little farm he thought he wanted, and tried to settle down to home life and farming. But then in the fall of 1905 he had gone back to his old love, *Spray*. Alone in her he had sailed to Grand Cayman in the Caribbean, and spent the winter of 1905-1906 there. About 1 April, he started for home. Bound north with a cargo of orchid tubers for President Theodore Roosevelt, he detoured up the Delaware River to lecture at Riverton, New Jersey, at the local yacht club. But at Riverton, just above Camden, a twelve-year-old girl made a charge against him which caused him to be arrested and jailed.

The newspaper report headed 'Capt. Slocum in Trouble. Accused of Maltreating A Girl on His Famous Yacht Spray,' described him as 'living off the glory and the story of sailing around the world alone.' It reported: 'Capt. Slocum asked that nothing should be said about his arrest. He said tonight in his defense that he was suffering from mental aberration.' This is not essentially different from news accounts cited in *The Search*. But the

next one suggests something else.

'Capt. Slocum Held on Girl's Charge | Famous Sailor is Arrested While Club's Guest. | He Protests Innocence,' is as sympathetic as the report above is hostile. This account stated: 'The old sailor was indignant at his arrest. He ridiculed the charge against him and when being taken to the jail said he would be vindicated.' There is a real discrepancy between a plea of mental aberration and a protestation of innocence. If, as the present writer believes, the biographer's job is not to judge his subject, but the evidence concerning his subject, then a postscript is in order stressing the fact that the charges against the captain finally went unproved. The fact that Slocum, after 42 days in jail, made a plea of non vult contendere (he will not contest it) may mean much or little. The non vult plea, when accepted by a New Jersey court, is an implied confession of guilt, but only implied. It is often used to effect a face-saving settlement, perhaps for

the state as much as for the defendant. We do not know why the captain made it, or who advised him. There is no record as to the extent to which he accepted, understood, or cared for these niceties of the law. The charge against him had been changed from a crime, rape, to a misdemeanor, probably indecent exposure. But after the extended delay—for the captain either could not, or would not, post bail—one can be sure that his main concern would be to get on with the voyage by whatever means offered.

After reading *The Search for Captain Slocum*, Robert Hillyer wrote the present writer: 'The dreadful and pitiful episode in Chapter 22, with poor Slocum's helpless bewilderment about it, seems to me adequately accounted for at the end of p. 226, where he is described as having "unbuttoned trousers." I think that the poor old man was quite innocent of "exposing" himself. I think he was negligently unbuttoned, that a girl nearing adolescence, in an era notorious for sexual hysteria, got a peep at his private parts and promptly concluded that he was trying to call her attention to them. Remember the children's primary role in the Salem witchcraft trials.' To which may be added that nothing is known of the character of the girl who made the charge.

Nothing proved, Slocum was released from the jail at Mt. Holly, New Jersey, 6 July 1906. Within a matter of hours he was on his way with the orchids. En route to Oyster Bay, where he arrived before 6 August, he sailed into Hempstead Harbor. Richard C. Burdette, a yachtsman who was there, in a letter (27 March 1957) to the present writer, said, 'We recognized the *Spray* and invited the captain over to our boat for breakfast which he accepted. After breakfast we all went over to the *Spray*....' Four snapshots were then taken. One shows Slocum on deck, flanked by three lady visitors, a fine pile of orchid stems and pseudobulbs in the foreground. The ladies look fresh and plump; the captain worn and hollow-cheeked. There is a very noticeable bump on his left cheekbone. The caption in the Burdette family album reads: 'Orchids for "Teddy" on the cabin of the Spray—Edna, Emma, Capt. Joshua Slocum, Helen.'

After visiting the President, and taking young Archibald Roosevelt for a week's cruise on *Spray*, the captain went home to his wife and farm on the island of Martha's Vineyard. What he then said to her, she to him, is not known, but apparently the reunion was not a success. The local weekly, the *Vineyard Gazette*, 16 August 1906, reported: 'Capt. Joshua Slocum, master of the Spray, was in town on Monday.' Less than a month later, on 10 September, the *New Bed ford Standard* reported him 'tied up

on the south side of Merrill's Wharf... before starting for the south...! By the end of the month, Slocum had slid into Bristol, Rhode Island, where the famous yacht designer and builder, Nat Herreshoff, had his Works. There the captain met up with his youngest son, J. Garfield Slocum, then twenty-five, and gave him, finally, a copy of the book which told of the voyage they had made together when Garfield was a little boy of six. The captain inscribed it:

To James G. Slocum
One of the crew of *Liberdade*This is the last copy of the Capt's poor efforts at a sea story
It is to appear however in better form by the author

Your Father Joshua Slocum Bristol R I Sept 30th 1996

But what those strange and cryptic words were intended to mean is a mystery.

In the fall of 1907, it was noted in *The Search*, Slocum sailed alone again in *Spray*. But his stop at Miami went unmentioned because it was not known. Vincent Gilpin of West Chester, Pennsylvania, in a letter to the present writer, said that he bought a copy of *Sailing Alone* from the captain who inscribed it:

To Mr Vincent Gilpin Yours very truly Joshua Slocum onboard the Spray Miami Jan 20th 1908

Miami, in 1908, was a very small town; its early growth had been slow. Nevertheless, Slocum followed his usual course when in port: he gave a lecture. 'I went to the lecture,' Vincent Gilpin wrote, 'and do not remember being too greatly thrilled, but I thought the old gentleman had a very

sprightly sense of humor. . . . '

Mr. Gilpin described how Slocum—and this was only fifty years ago—lived at Miami. 'I rather think he lived on the *Spray*.... He was thrifty and usually hard up—which didn't bother him for his wants were few. *Spray*... was very simply fitted out, rather bare, and very *damp*, from many soakings with salt water, and Slocum kept a little wood-stove going to help dry her out. I remember seeing him lunching one day on what

looked liked a half-baked potato, from which he sliced pieces with his jack-knife. He was rather shabbily dressed in civilian clothes, with a ragged black felt hat.... On the whole, I felt him a good example of the old-line Yankee skipper, competent, self-reliant, not talkative. but perfectly friendly and ready to answer questions. He was obviously a first-class boat-handler—which is something quite different from being a ship-captain; apparently he was both, beside being a shipwright. A very capable man; and a lonely, unhappy man.'

Apparently there was enough yachting interest in Slocum to make Dan Lundy, proprietor of the Miami Boat Works, think that to help him refit would be good advertising. Spray was hauled out and photographed with Slocum standing on deck. 'Spray Boston,' on the transom is in focus. Vincent Gilpin's smaller boat is seen alongside, himself sitting, Dan Lundy standing, on the stern. 'Miami Boat Works' shows up boldly on the gable end of the boat shed. The photo, later printed on a calendar, gives one of the very best views, as well as the latest, of the boat which soon was to pass into history. 'It is my recollection,' Vincent Gilpin wrote, 'that the Spray left Miami bound for Nassau and a collecting cruise in the Bahamas to stock up with shells, corals and other curios for sale.'

The Search stated that on 2 June 1908, Captain Slocum sailed into New York harbor with a two-ton piece of coral on board consigned to the American Museum of Natural History. According to a newspaper account, it had been found off Andros Island, Bahamas, by B. E. Dahlgren who arranged with Slocum to carry it home on Spray. The coral was delivered, but what had become of it? It seemed to have dropped out of sight.

Charlotte W. Stove, of the Museum staff, could not see how a two-ton piece could slip through Museum fingers. She made her own search, and on p. 33 of the Museum's Annual Report for 1908, found: 'In the spring, Dr. Dahlgren . . . visited the Bahama Islands . . . made extensive studies of several reefs and secured . . . an exceptionally fine example of a madrepore coral which measures ten feet in length and weighs nearly two tons.'

Mrs. Stove then consulted Chris Olsen, retired Museum hand, who in 1916 had worked on the Museum's reproduction of a coral reef. He believes that the Dahlgren-Slocum piece was, and is, embedded in the group he helped install. Mrs. Stove said in a letter to the present writer that 'it is very unlikely that the Museum would have received two like pieces of the same type and measurements and from the same locality in the same

year.' There is no longer anyone to say positively that this is the piece Captain Slocum brought, but some kinds of circumstantial evidence are very convincing.

Spray went missing, lost with all hands. No smallest bit of her ever came to light to hint at the place or date of her end. No one can say how her captain died, with what words on his lips; or thoughts, or regrets. But one can and will conjecture as to what might have happened. Vincent Gilpin, the yachtsman who saw Spray in the years of her decline, suggested a theory concerning her finish which differs from theories summarized in The Search. 'As to the seaworthiness of the Spray, she was clumsy, heavy, rather shoal draft, very beamy. . . . Such a boat is well fitted to survive almost any weather at sea, if strongly built. . . . But thousands of miles of open ocean would give her plenty of rack and strain, and by the time she got to Miami in 1908, her sails and rigging would have been renewed more than once, and would have always had weak spots. This alone, without any serious failure of the hull, might have caused her loss. . . . '

T. McKean Downs, M.D., of Bryn Mawr, Pennsylvania, in a letter to the present writer (22 March 1957), suggested that 'the Spray was so rotten that she just fell apart.' He based his opinion on his many readings of Sailing Alone. He observed that when Slocum first rebuilt the sloop, he used whatever was closest to hand, or cost least—which clearly included green timber; and that while a boat built of well-seasoned stuff may have a long life, one built of green may have quite a short one, especially a boat which spends much time in the tropics, as, of course, Slocum's did. Dr. Downs guessed that 'the Spray broke up—disintegrated like the "one hoss shay."

But however he went, Slocum remains the great setter forth of the spirit of seagoing Yankeeism. He was heart and fiber of the New England people of the sea; and his old-fashioned Yankee nature and temperament were as tough and flinty as his native northern coast. A courageous and tenacious confronter of life, a resolute, unyielding battler with the elements, an asserter against a world he did not make, he had both the fine deep sense for the poetry inherent in things, and the power to classicize experience.

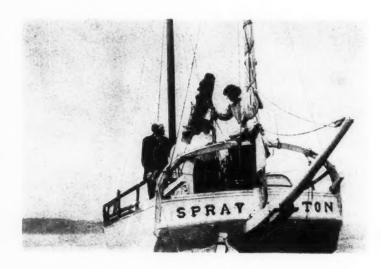
Walter Magnes Teller was born in 1910 in New Orleans. He is a graduate of Haverford College, a former lieutenant (jg) in the U. S. Naval Reserve, and a Fellow of the John Simon Guggenheim Memorial Foundation. His latest book was The Search for Captain Slocum: A Biography. His forthcoming one, The Voyages of Joshua Slocum, is to be published this autumn by Rutgers University Press.



Spray hauled out at Miami Boat Works with Captain Slocum standing on deck



Captain Joshua Slocum, age 63, Potomac River, Washington, D. C., 1907 Photograph by Winfield Scott Cline





Captain Slocium with visitors aboard Spray at Oyster Bay, Long Island, New York in the summer of 1906 Snapshots by Richard C. Burdette

From River Clyde to Unimak Pass: Ship Star of Falkland

PART III

BY HAROLD HUYCKE

Little time was lost in getting the ship ready to discharge cargo. At 6:30 A.M. the morning after arrival a tug brought a floating steam-donkey engine alongside to assist with the discharge. The ship's anchor was hove up and the tug towed *Arapahoe* in closer to the harbor where *Arapahoe* anchored again, this time to sixty-five fathoms on her port anchor. A floating derrick with two donkey boilers came alongside toward the end of the day, after most of the ship's gear had been rigged for cargo work.

On 3 September discharging began, and continued during daylight hours for almost three weeks. From time to time a hatch lay idle when the supply of lighters ran out, but for the most part cargo work was carried on in a steady manner. First out was the Black Panther dynamite, which came out of number three hatch, much to the relief of all. In time the gear was doubled up while the automobiles came out. The drums of gasoline and case-oil were safely lightered ashore and finally only the steel rails and bars remained.

A week after the discharging began the donkey engine was taken to the side of *Monongahela* and placed aboard that ship for discharging work. But *Arapahoe*'s gear continued to handle the cargo on the full-rigger.

Part of the crew of *Arapahoe* was kept at work about the ship and the rest was put to work recoopering damaged cargo cases in the hatches. In addition to the ship's crew, a total of thirty-four shoreside workers came aboard to assist. Listed in their order of importance, if not in terms of accomplishment, they were: captain-inspector, three guards, one head checker, four hatch checkers, one stevedore foreman, three donkeymen, four customs guards, fifteen laborers and two odd hands.

Sails were hung out and dried, a few being taken ashore for repairs. The older German sails were badly torn and worn. On 12 September the

broken stump of the topgallant mast was sent down and within a few days a new mast and its yards were returned to place.

The last of the cargo was coming out of number one hatch when three rails slipped out of the slings and fell through the 'skin' in the lower hold. Fortunately for the ship this skin was a covering or ceiling over the remaining ballast in the bottom of the ship, and prevented the rails from going through the bottom. Little damage was done and no delay incurred.

While Arapahoe lay at anchor discharging her cargo, the big, steel, fourmast bark Star of Poland was homeward bound from Manila to San Francisco. This ship was owned by the Alaska Packers Association and was then under charter to the Shipping Board for a round voyage to Manila. She had discharged her outward general cargo and loaded part of a homeward cargo and had sailed in mid-July for San Francisco. Progress was slow as she sought to work into higher latitudes for fair winds and favorable currents. On 15 September, while trying to find the entrance to Yokohama Harbor to replenish stores, she was wrecked on the coast of Japan and became a total loss. This loss was to have a decided effect on the last chapter of Arapahoe's career, but one that did not start for another three years.

At 1 P.M. on 22 September the last of Arapahoe's steel cargo came out of the hold and stowed on the lighter. As soon as the hatch was clear all hands turned to cleaning up and sweeping down the hold, preparatory to loading a homeward cargo. Holds and limbers were inspected. The homeward cargo consisted of baled hemp for the most part, with some drums of coconut oil to complete the load. More than three weeks passed while this cargo was taken aboard and stowed. By 17 October all hatches were closed, battened and secured for sea.

On that date Arapahoe towed out of Manila Harbor and set sail for the passage home. Sailing about the same time was a Belgian's or Dutch training ship, a four-mast bark, also bound for San Francisco. The longshoremen on the Manila waterfront took a look at the smart appearance of the foreigner and her large number of cadets. She should make a quick passage. Another glance toward Arapahoe and her crew of cadets—Captain Wilhelmsen claimed his boys had been green but willing; but there were also some 'farmers' amongst his crowd for ard there, and a few 'draftees' who had chosen a career in Arapahoe instead of the U. S. Army.

^{7 &#}x27;American Four-mast Bark Star of Poland ex Acme,' The American Neptune, VIII, 4 (1948). 8 Probably the Belgian L'Avenir.

The waterfront idlers placed their money on the four-master and watched each ship as it disappeared in the dark background of Bataan minsula, towing toward the open sea.

Hardly had Arapahoe cleared the island of Luzon when a hard gale drove down upon the loaded ship and blew out some of her strongest sails. For two days it was 'all hands' for the most part, clewing up topgallants, setting staysails and bending what new canvas there was in place of that blown out. For the best part of a week Arapahoe battled the autumn gale but kept on. The four-master also took a beating and finally turned and ran toward Hong Kong in a damaged condition. She was eventually towed into that port for repairs.

Finally the gale blew itself out and on 29 October the sea had smoothed down and more canvas set. During those few days of hard weather the crew of cadets and older professionals on *Arapahoe* were given a thorough treat in working their ship of sails, though Captain Wilhelmsen took no unnecessary chances. *Arapahoe* averaged seven knots on a couple of occasions when the wind was fair, but seldom topped that. She wasn't going to raise any Pacific coast lights twenty-six days out as she had done sixteen years before under the British flag. More than twice that time would be used up on her passage home, with her crew of Shipping Board 'boys.'

Most of the older sails from the ship's German days were blown out or badly torn—some even blown away while furled to the yards. Ship's work for the most part consisted of sewing canvas during the passage home. Arapahoe arrived off the San Francisco Lightship on 13 December 1918, fifty-seven days from Manila, and towed in to her discharging berth. The war in Europe had ended, and with it came a hungry cry from the war-weary millions on the Continent. Shipping was still very much in demand and the wartime boom carried on for many months, while freight rates remained high and relief cargoes piled high on San Francisco wharves. Though a large number of ships did load out of San Francisco for Europe, Arapahoe was chartered for another voyage to Manila.

Captain Wilhelmsen shifted *Arapahoe* to a loading berth in the Bay and, after going to maximum draft with a general cargo, sailed on 22 January 1919. The second westbound Pacific crossing was considerably better than the first taking fifty-seven days. After discharging in Manila, a cargo of 1,100 tons of Philippine sugar was loaded for the return passage, consigned to Struthers and Dixon, the ship's managing operators.

Arapahoe had arrived at Manila on 20 March 1919 and spent a little over a month there, discharging and then loading the homeward sugar

cargo. She sailed from Manila on 23 April and made the eastward passage to San Francisco in eighty-six days, arriving off the Golden Gate on 17

July 1919.

Here Captain Wilhelmsen left the ship and turned over his command to Captain William 'Bos'n Billy' Sorensen. Captain Sorensen brought with him to *Arapahoe* a chief mate, Mr. Anderson, who had been with him for many years in the wooden full-rigger *Tacoma*. Captain Sorensen had been in command of *Tacoma* for the Alaska Packers Association for more than a decade, but in May 1918 his fine old ship was crushed in a huge field of ice while approaching the Bristol Bay canneries and was lost.

Arapahoe lay at anchor off Butchertown in San Francisco when Captain Wilhelmsen^a packed his gear and moved ashore. Captain Sorensen and his friend and mate, Mr. Anderson, took charge of the big steel ship.

Arapahoe, still operated by Struthers and Dixon, loaded a full cargo of barley bound to Queenstown for orders, and left the Bay on 7 September 1919. She would not go around Cape Horn this time; the Panama Canal was open and in full use by steamers and sailing ships alike. Her sails remained securely furled or stowed below because she went in tow of West Coyote, another of Struthers and Dixon's ships, and one of the newly finished steamers owned by the Shipping Board.

All the way down the coast went the pair, taking sixteen days for the run to Panama Bay. One more day saw them through the Canal and the tow was resumed through the Caribbean up through Mona Passage, the well-traveled waterway between Puerto Rico and Haiti. Once clear of Mona Passage the towline was dropped and once again *Arapahoe* set her canvas to proceed on her voyage under her own power—and the wind's.

Including the time under tow, Arapahoe was over fifty days from Cristobal to Queenstown. She lay in the Irish port for three days awaiting orders to proceed to a discharging berth in the British Isles or on the Continent. She was ordered to Leith and arrived at that port, on the east coast of England on 2 December 1919, sixty-nine days from Cristobal, eighty-six days from San Francisco. As Durbridge, she had sailed from the Columbia River to Swansea in 133 days only fourteen years before, a passage which took her all the way around South America; the earlier passage required forty-seven days more than this postwar passage. But 1919 is different. For one thing there is the Panama Canal which cuts short the mileage; and time is of more importance. The sailing ship men have

⁹ This was Captain Wilhelmsen's last sailing ship. From *Arapahoe* he went into steam, commanding a number of ships such as *West Prospect* and *Sacramento*. He retired from active seafaring after World War II and now lives in retirement in San Francisco.

left the wet and sodden fo'c'sls of windjammers and have gone into steam where there is a warm fiddly to dry out watersoaked socks and jerseys. And *Arapahoe* is Government-owned, where the red pencil of economy is not always seen. The expense of having a steamer tow *Arapahoe* for over three thousand miles is not a serious thing.

The war had been over for more than a year when Arapahoe arrived in the Tyne River to discharge her cargo. Britain's great Expeditionary Force had come home and disbanded, but found it difficult to be absorbed into the country's civil economy. Though the shipping industry was enjoying a period of prosperous, though temporary, boom times, there

was a shortage of jobs ashore in the British Isles.

Arapahoe moored in the Princes Dock, across from the grain chutes and the entire cargo of barley was discharged from the sailing ship by hand. This provided more work for the gangs of idle men that appeared on the waterfront each morning to fight over available jobs. And fight they did. Three weeks were required to discharge the cargo. Just as the last sling load was swept up and sent ashore, the specter of a nationwide coal strike loomed up. On Christmas Day 1919 the wheels of Britain's coal industry began to slow down and came slowly to a halt.

Before the war Britain exported coal in huge quantities and thus provided work for a large segment of British shipping, coastwise and offshore. But this strike was not a short one, and as the winter progressed, the ranks of idled coasting ships increased and the coal chutes remained

idle.

Arapahoe was towed from Leith to Newcastle and moored in idleness amongst a number of cold and silent steamers. Her immediate future was none too bright. She anchored off Yarrow and lay there for two weeks before she was again shifted, this time to South Shields, and lay amongst

a large fleet of idle steamers.

The extended blockade of Germany had ended only six months before and the need for grain and foodstuffs was urgent, in Germany as well as northern Europe. Sailing ship owners kept their vessels profitably employed ballasting out to the Plate River or Australia for grain cargoes. A few called in San Francisco for wheat and barley. As the British coal strike lengthened from days to weeks and months, the coal trade from Hampton Roads to Europe demanded a large number of bottoms.

But for the laid up ships in the Tyne there were no cargoes available. A shipowner might take a chance of getting his ship away from such dreary surroundings, steaming or sailing out in ballast on the chance of picking up a grain or coal cargo but it was a case of swallowing the ex-

pense of a ballast passage to begin with. *Arapahoe* was the only sailing ship in port and engendered considerable interest amongst the shipping people and townsfolk who saw her tall masts above the stumpy masts and

chimney-pot funnels of the idle steamers.

Captain Sorensen became ill and was taken to the hospital in Edinburgh, suffering from pneumonia and apparently close to the end. It was a poor time to lose a master. Mr. Anderson, the mate, remained in his position as mate, refusing the advance to master, though it was felt by those who remained with the ship that he should and could have filled Captain Sorensen's place very ably. A British master came aboard, staying by the ship for several weeks.

Sailors came and went. The original gang from San Francisco paid off and left, almost to the last man, to be followed by the seamen of other ships who might have hoped that this one ship, flying the Stars and Stripes, would be lucky enough to find a cargo and get out to sea. But ill luck stuck by *Arapahoe* until the end of March 1920. With such a long time ashore, Captain Sorensen had time to recover from his illness and finally returned to the ship which was still lying idle in South Shields.

Somehow a coal charter was picked up for Arapahoe, designed to load

her with a cargo for Lisbon but nothing came of it.

One of the few remaining sailors who signed on in San Francisco was Mr. Arthur Aitken. His account of what might have transpired to break the jinx that kept *Arapahoe* in idleness is set forth as follows:

One day when in the bar of the Bristol Hotel in which Captain Sorensen was living, I happened to hear several British Naval officers talking about steam coal for their navy in Gibraltar. I happened to be of some interest to them because one had learned that I belonged to the big square-rigger at South Shields, so they told me that the coal they used was stored in such old hulks at Gilbraltar. I told them that we would sail a full cargo down there for nothing just to get out. By a freak of nature in a few days we were under the coal chutes and filled the ship for the navy at Gibraltar.

Of all the tough passages I have ever made! In the Channel from Beachy Head to the Lizard we beat against a full Westerly gale for ten days, about ship twice on a watch day and night. It was as bad as off Cape Horn and bitter cold. On the tenth day, Captain Sorensen told me that if we did not clear the Lizard that night he would about ship and run up the North Sea around the Falklands and try the other side. What a relief. We made it around and with royals set, bettered fourteen knots down the Portuguese Coast.

Arapahoe had sailed from South Shields on 14 April 1920 with a good crew of Scandinavians. Captain Sorensen attempted to pass through the English Channel, beating against headwinds all the way. While under

the cliffs on the Dover side, a steamer approached Arapahoe which was close-hauled on the port tack. Though she had the right of way, Captain Sorensen attempted to avoid a possible collision with the oncoming steamer by swinging his ship's head off to starboard. The sails caught the full force of the stiff breeze and heeled the sailing ship over on her beam ends until the main yard touched the water. Then the coal shifted, keeping Arapahoe lying over with a fifteen-degree list. Down into the hold went the crew, trimming it back to an even keel. During this flurry of activity the old, experienced mate came close to being washed overboard but fell on deck and suffered a broken arm. In addition to this, Captain Sorensen bawled him out for what appeared to be unnecessary carelessness on the part of one who should have known better.

A decade had passed since the ship, with her holds full of British coal, had beat out of the Channel into the North Atlantic. The western ocean had seemingly not forgotten that, as *Steinbeh*, she had taken a beating and had to run before the onslaught, only to return again and finally reach her destination.

Arapahoe finally arrived at Gibraltar on 11 May, twenty-seven days from the Tyne. Here she shifted from hulk to hulk, discharging her coal by baskets, finally completing the discharge at the pier at the inner harbor. One of the hulks was the old wooden ship *Three Brothers*, formerly a well-known American steamer converted to a sailing ship. She had lain in Gibraltar for nearly thirty years, serving in the capacity of a coal hulk when Arapahoe came alongside to discharge as so many ships had done in the past.

It was too much to hope that another cargo could be found when the coal was out. Captain Sorensen took in enough sand and gravel ballast to keep his ship standing upright and sailed for Hampton Roads on 18 June 1920. The Gibraltar jails held his fine crew of Scandinavians, so a new crew of whatever could be dredged up in Gibraltar was shipped to replace them. It was a poor crew; fortunately the Atlantic crossing was attempted in the summer months.

On 20 July Arapahoe was spoken by a steamer in 37-30 N., 60-10 W. By the end of July she had made a fairly good crossing, as she approached the Virginia Capes. But the edge of an early hurricane forced Arapahoe to turn and run before strong winds for three days under goosewinged lower topsails. It was two more weeks before she made Cape Henry, sailing in toward the pilot boat in company with three other square-riggers also bound for the coal tipples of Norfolk or Newport News. Arapahoe arrived at Newport News on 11 August, fifty-three days from Gibraltar.

The Shipping Board had arranged to sell the ship to a prospective buyer at the time, but the sale was not completed. In anticipation of this, Captain Sorensen, Mr. Anderson and others of the crew left the ship. Captain Sorensen went to New York to wind up the ship's business with the agents and then on to San Francisco and home. A new master, Captain Holmquist, took command and lost little time getting Arabahoe stored and ready for sea. Instead of loading in Hampton Roads, Arabahoe was ordered to Pensacola, Florida, having been chartered to load a cargo of lumber for Montevideo.

On 17 August 1920 Arapahoe towed out of Hampton Roads, passing the Norwegian bark Dagmar, forty-two days out of Havre, and the Danish bark Kylemore, forty-eight days from Rotterdam, both inbound for coal cargoes. Arapahoe made the passage around to Pensacola in sixteen days. She lay in the Florida port all of September and well into October before she was loaded and towed to sea. When she finally sailed on 26 October it had become quite apparent that a decline in freights had set in and this could very well be the ship's last voyage for some time to come. As if in anticipation of this, Arapahoe took seventy-six days to reach Montevideo, arriving on 11 January 1921.

Another two months were consumed in discharging the cargo and early in March she sailed for Barbadoes for orders, assuming she would then

proceed to Hampton Roads.

Instead of Hampton Roads and an expected coal cargo, Arapahoe was ordered to New York. The coal strike in Britain had ended and the market for American coal abroad had decreased, though a number of European sailing ships were yet to call at Newport News and Norfolk for coal before the end of the year.

Arapahoe approached the entrance to New York harbor on 25 April.

At 9 P.M. on the twenty-sixth Ambrose Light was sighted.

From the log:

Tuesday, 26 April. 1:50 PM Barnegat Light abeam, five miles off. Sailing in sight of light. 9 PM sighted Ambrose light. Clewed up main sail, foresail fore and main royal, fore and main and mizzen gallants. Hove ship to, waiting for pilot.

At 11 P.M. that night the pilot boarded the ship and a course was steered for Ambrose Channel and an anchorage. The wind was fair so no tug was engaged. At 3:30 A.M., Wednesday, 27 April, the port anchor and forty fathoms of chain were let go as *Arapahoe* came to anchor in the Narrows, a mile south of Fort Hamilton, Brooklyn.

The passage from Montevideo was completed in forty-eight days.

Within a few hours the carpenter had a fire started under the donkey engine and the crew was called out to heave in the anchor and make fast the tug *Margaret F. Stanford* for the shift up the harbor. Within an hour the port's quarantine doctor, customs and immigration officials were on board and down went the anchor again with thirty-five fathoms of chain. Finally all was clear, the officials went ashore and the tug dismissed with the pilot on board.

The Potter Transportation Company of New York were local agents, appointed by the owner and Struthers and Dixon to attend to the ship's needs and services while in New York.

The day's work on *Arapahoe* consisted for the most part of unbending sails from the foremast, and a few from the main and mizzen. The following day was spent much the same with all sails stowed in the sail locker and paint pots broken out for a little painting over of rust spots. With the end of this day's work, most of the crew was paid off, only Captain Holmquist, Mr. Ludvig Froberg the mate, able seamen H. Vallen, Helms, Isackson, Benson, and the steward and cabin boy remaining by the ship.

Three days passed at anchorage. On 2 May, Monday, a fumigation team came aboard accompanied by the quarantine doctor. Their jobs were done by mid-afternoon and ashore they went. The following day the ship's donkey engine was steamed up and the anchor hove up for a shift across the harbor, the tug *Baldridge* assisting her to Reed Hook. All was well until the next day when a moderate gale swept across the bay and set the empty full-rigger to swinging in arcs on the port anchor cable. The starboard anchor was let go to keep her under control while the bad weather passed, and early the next morning it was hove in again and secured.

Only the Old Man, mate and a few sailors continued to stay by the ship, hoping that a charter might be found and cargo secured. Ship's work went steadily along as well as could be expected with a limited number of men on board. A night watchman by the name of Mr. Moore stopped on board during these idle days. Sundays were 'kept holy,' with no work performed.

The Shipping Board was negotiating a sale of *Arapahoe* to a Mr. V. S. Fox, the price reported to be \$165,000. But it fell through and the ship continued in her idle status with no prospect of employment in sight. May passed. June and July came and went. In August she was shifted to Jamaica Bay, Long Island, where she spent the rest of the year 1921 and a few weeks of 1922. Early in February she was shifted to Lancaster Point, Pralls Island, in the Arthur Kill near Carteret. New Jersey. Still, there

were no prospects of activity for Arapahoe, then in her twenty-ninth year.

Another chapter in the ship's history was coming to a close.

Not far off, in the lee of Staten Island, lay the full-rigger *Tonawanda*. She too had been a German ship caught in the United States in 1914 and forced into involuntary idleness until April 1917. As *Indra*, she was seized and operated by the Shipping Board as a 'cadet' training ship while the need for shipping was severe. But now the need was gone. Even the great fleet of 'emergency' steamers built in the last year of the war and in 1919 was coming home to lay up. Little chance of a sailing ship to keep busy.

In London the Allied Reparations Commission sat in deliberation, trying to create a formula by which the merchant fleet of defeated Germany could be divided up amongst the Allies. Far to the south ard in the open roadsteads of the Chilean coast five dozen big German sailing ships rolled silently in their anchorages awaiting an unknown fate. Another dozen square-riggers roasted under a blazing sun in the open roadstead of Santa Rosalia, Baja California, tugging at anchor cables which were then nearly seven years in the water. There, but for the hand of fate, *Arabahoe* might have been instead of New York Harbor.

Captain Sorensen had been back on the Coast for a year and a half when he was called into the office of the Alaska Packers Association early in 1922. Purchase agreements with the Shipping Board had been completed and *Arapahoe* was sold to the Association for a sum of between \$20,000 and \$25,000. For the loss of *Star of Poland* in September 1918, the Association had been compensated with an amount of money which permitted them to buy *Arapahoe* and the four-masted bark *Edward Sewall*. *Edward Sewall* was owned by the Texas Company, but at the time was lying idle in New Orleans.

It was quite convenient for the Association to send Captain Sorensen back to New York to take command of the new addition to their fleet of sailing ships, and somewhat of a homecoming for the Old Man. He had been in command for nearly a year, and that would be of some advantage to the owners as well.

Preparations for the fishing and canning season of 1922 in Alaska would begin early in March, but it wasn't expected that *Arapahoe* would be delivered in San Francisco in time for that. Captain Sorensen proceeded to New York in February and joined the ship late in the month as she lay at Lancaster Point. On 28 February he officially took possession of the ship for the Alaska Packers and had her shifted to dry dock at Robin's Shipyard, Brooklyn. Balfour, Williamson and Company of New York

were appointed to act as agents on behalf of the owners and arranged for docking and husbanding of the ship while in New York.

Only two days were spent in the dry dock while sea valves were checked and the underwater portion of the hull was cleaned and painted. Another shift was made, this time to the Nineteenth Street Pier in Brooklyn where work was begun getting the ship in condition for a passage to Hampton Roads, and then a passage to the Pacific Coast.

On 12 March 1922 Arapahoe was moved out of her refitting berth and taken in tow by a tug bound for Hampton Roads. The appearances of square-rigged sailing ships in American ports were not so frequent in those days, as the ballasted full-rigger moved out through the Narrows and into deep water. Within the twelve-month period just past dozens of European-owned sailing ships were laid up when the freight rates of ocean cargoes began a long decline.

The tow down the coast took less than forty-eight hours. At 2:45 A.M., 14 March, *Arapahoe*'s anchor splashed down off the Norfolk coal piers while the ship waited for daylight. The day's work entailed the discharging of ballast, a job that took four days.

Arapahoe was not the only square-rigger to be seen in the anchorages of Hampton Roads. Depressed conditions kept a number of idle ships anchored there, in hopes that perhaps an upswing in rates would provide profitable employment. The Norwegian full-rigger Osmund was there, also the ship Bennestvet and the four-mast bark Stoveren. Not far away lay a ship without a figurehead, the Norwegian Sophie which was to outlive them all. As Tusitala she was destined to become the last active American-flag, cargo-carrying square-rigger in the American intercoastal trade. But her rôle in that capacity was yet to come.

Shortly after noon on 18 March, *Arapahoe* was moored to a coal pier and loading began. Coal cars in seemingly endless streams rolled into position under the chutes, dumped their loads into the conveyor belts, which in turn sent the black diamonds roaring by the tons into *Arapahoe*'s hold. Only ten and a half hours were required to complete the loading operation, and as soon as hatches were covered and battened down, *Arapahoe* was shifted into the stream. There she was made ready for sea.

Late in the afternoon of 21 March a tug took charge and towed *Ara-pahoe* to sea, out through the silent groups of sailing ships, into the greenish-brown waters of the bay entrance and beyond the lightship. Then, for the first time in nearly a year, *Arapahoe*'s sails were again set and the ship was under way.

Thirteen days later she arrived off Colon, and entered the series of locks of the Panama Canal. Here again she was taken in tow, maneuvered through the winding channels of the lakes and channels of the Canal and into the Pacific. Captain Sorensen retained the services of the tug in order to get beyond the confines of Panama Bay and its calms and baffling breezes. The ship towed to sea from Panama at 1 P.M. on 4 April. In the afternoon of the following day, when she was 212 miles from Panama, the towline was dropped and *Arapahoe* set sail to proceed on her own way.

American flag sailing ships were not entirely new to the Panama Canal. Less than four months previous, the four-mast bark Golden Gate had passed through on her return passage from England to San Francisco. And only sixteen days had passed since the Alaska Packers' new purchase, Edward Sewell, commanded by Captain A. H. Schulz, cleared the Canal for San Francisco. Golden Gate required ninety-six days to reach San Francisco while Edward Sewall made the passage in one day less than half that time. Arapahoe arrived off the Golden Gate about noon on 22 May, and anchored inside the entrance at 2:30 p.m., forty-seven days and five hours from Panama. Thus her last voyage in what might have been considered the general cargo trade was done.

Both Edward Sewall and Arapahoe arrived in San Francisco too late for the fishing season of 1922, but their appearance in Fortmann Basin, the Alaska Packers' yard in Alameda, presaged the retirement of part of the company's fleet of older wind ships. For this season of 1922 was the last in which the wooden square-riggers and one of the older iron ships were

used.

Arapahoe arrived in San Francisco less than two weeks after most of the Association's cannery ships had sailed for Alaska. Twenty-two sailing ships had cleared for the numerous canneries in Bristol Bay, the Gulf of Alaska and southeastern Alaska belonging to the Association. There were other companies in San Francisco, Columbia River and Puget Sound which owned and operated sailing ships in this type of enterprise, but none on such a scale as this.

The Estuary between Oakland and Alameda provided a sailing ship haven in which dozens of other large ships were moored during this year of 1922—moored in idleness as were those ships in the Atlantic ports. Those ships were victims of a fluctuating economic market; the Association's fleet of ships were all integrated in a seasonal operation of carrying supplies to the Alaskan canneries and returning the pack of canned salmon at the end of the season.

Arapahoe underwent some changes in her appearance to fit her for her new calling as a cannery ship. During the fall and winter of 1922-1923, her hull was sandblasted and painted from keel to bulwarks. In order to provide more living quarters for cannery hands and fishermen, her poop and forecastlehead were lengthened and deckhouses added and rebuilt. Her forecastlehead had originally measured thirty-six feet long. This was lengthened to forty-eight feet. The open poop was lengthened from forty-one feet to 103 feet, and rows of bunks were built in under the poop extension. And, after steering at an open wheel for thirty years, the crews of this blue-water trader were finally granted the protection of a wheelhouse. A charthouse and steel whaleback-type wheelhouse were built on the poop, located abaft the mizzenmast.

These additions and alterations accounted for most of *Arapahoe*'s exterior changes. An electric lighting system was installed, being run by an auxiliary electric power plant which also furnished power for a new wireless set. Four 6,500-gallon water tanks were installed in living quarters and, when all this work was completed. *Arapahoe* was given Lloyd's highest classification rating, and her name was changed to *Star of Falk*-

land.

For the refitted Star of Falkland the fishing season of 1923 began in March when Captain Andrew Thomsen took command of the ship and saw to it that she was made ready for sea. Captain Thomsen's last command had been the bark Star of Iceland, in which he had been for three seasons. Prior to that he had been master of the old wooden down-easter Indiana for seven years, which was now being left in idle status in Alameda for the first time in nearly a quarter century. It was to Indiana's old cannery station, Clark's Point at the Nushagak Station that Star of Falkland was assigned.

Star of Falkland was one of sixteen square-riggers departing from San Francisco for Alaskan waters in the employ of the Alaska Packers Association for the season of 1923. The schooner Metha Nelson was the only wooden ship in the fleet that year. The iron bark Star of Chile remained behind, in addition to the wooden ships Santa Clara, Indiana, L. J. Morse, Bohemia, the barkentine Gentennial and the schooner Prosper. But these older ships were being replaced by Star of Falkland and the four-mast bark Star of Shetland, ex-Edward Sewall, both ships on their initial voyages in this special kind of enterprise. The outlook for the use of sailing ships in 1923, in this trade, was not too gloomy.

Star of Falkland sailed from San Francisco on 2 May for Nushagak in Bristol Bay, and made the passage up in twenty-five days. The ship lay

at anchor there, with *Metha Nelson* nearby, until early August. Then the cases of salmon were stowed in the ship's hold and the cannery hands returned aboard. On 5 August Captain Thomsen took his loaded ship into the Bering Sea and set sail for Unimak Pass and the Golden Gate. The homeward run occupied twenty-four days. The total cargo included 26,-850 cases for the season's work.

The winter was spent in customary idleness in Alameda in company with the rest of the fleet. Work on the ship included renewing the fore royal yard, caulking the deck in the Oriental quarters and installing a

Delco lighting plant.

The season of 1924 was much like that of the previous year. Captain Thomsen began loading at a San Francisco berth on 25 April and sailed on 11 May, being towed out of the harbor by the company's steamer Kvichak. The passage to Nushagak was made in twenty-seven days, arriving on 8 August. The homeward run took sixteen days, arriving on 24 August. Her cargo for the season was considerably larger than the previous year's load, totaling 50,778 cases. The old water tanks in the lower hold were replaced with new ones, and that constituted the major job of maintenance and repair for the winter of 1924-1925.

The year 1925 was the last year in which the cannery fleet was comprised of sailing ships only. The Association had been operating small steamers such as *Kvichak* and *Unimak* for some time, but they were used to supplement the operations of the larger sailing ships. Seventeen windjammers, all square-riggers except the schooner *Metha Nelson* and barkentine *Centennial*, went north to the waters of Alaska. For *Star of Falkland* and her master it was a routine season. She sailed from San Francisco on 29 April and arrived at Nushagak thirty days out. Homeward bound in the fall with 28,000 cases of salmon, the ship sailed from Alaska on 1 August and was off the Golden Gate within twenty-two days.

Within two months after the arrival home of the fleet of sailing ships, the Association bought the steamer *Newport News*, a ship with 5,500 tons deadweight capacity. She was renamed *Arctic*. As the new steamer was being delivered to her new owners. *Star of Falkland* and the rest of the fleet

of sailers were being given their annual winter overhaul.

For Star of Falkland the overhaul included painting of the hull and spars; overhaul and repairing of sails and rigging; caulking of forecastle head extension; and dry-docking. In the dry dock the outside hull was scraped, cleaned and painted, and sea suction valves and strainers were overhauled. A new strongback for the main hatch was renewed and the

bulwarks on both sides were reinforced where they were found to be weakened. There were six other ships in the fleet which were given their winter overhaul, as usual, but were not to see Alaskan waters again.

Captain Thomsen stored his ship in San Francisco in April 1926 and sailed on 21 April for Nushagak. Star of Falkland was one of ten in the fleet this year. Arctic not only helped replace seven sailing ships for the season's work, but was engaged to tow Star of Holland to her station in Alaska.

Before the sailing ship fleet was fitted out and made ready for its annual trip to Alaska, another steamer was added to the Association's floating stock. The Dutch steamer *Salatiga*, 11.459 tons deadweight capacity, was purchased in February 1926 and became *Bering*. Thus these two steamers began the 'era of steam' and hastened the day when the pageantry of square-rigged ships in the Pacific Northwest would come to an end.

Star of Falkland made the northbound passage to Nushagak in twenty-eight days, sailing from the Golden Gate on 21 April and arriving on 19 May. Homeward bound in the late summer she brought a big pack of 78,481 cases of salmon, arriving in San Francisco Bay on 29 August, fifteen days from Alaska.

There was no doubt that the advent of steam in the service of the Alaska Packers Association was permanent, but the use of sailing ships was not quite at an end. During the winter of 1926-1927 the Association spent \$1,033.58 to paint the hull and spars of *Star of Falkland*, renewed some yards at a cost of \$2,630.14; dry-docked, cleaned and painted the ship for \$671.00, and 'purchased' a stockless anchor from the idle full-rigger *Star of Italy* for \$660.00. Money like this was not to be spent on a sailing ship which was going out of service immediately. But *Star of Falkland* was only one of six square-riggers designated for use during the 1927 season. The four-masted barks *Star of Greenland* and *Star of Scotland* were left in idleness; *Star of Lapland* which had stayed in Alameda during the summer of 1926 was activated again, but only for this one last season. Even *Star of Shetland* was to remain idle—the same ship that had been purchased only five years before along with *Star of Falkland*. The end, then, could not be very far off.

Captain Andrew Thomsen was replaced in *Star of Falkland* by Captain John Widerstrom. Captain Widerstrom had had a long career at sea, having been with the Association since 1909. From 1913 to 1920 he had com-

 $^{^{10}}$ 'Case oil and Canned Salmon: Star of Lapland ex Atlas,' The American Neptune, XVI, 1 (1956).

manded Star of France; from 1921 through 1925 he was master of Star of Holland, and in 1926 had been in Star of Zealand.

Once again Star of Falkland was shifted from Fortmann Basin in Alameda to San Francisco where stores, fishermen and cannery hands were taken aboard. On 23 April she was towed to sea two days behind Star of Zealand, also bound for Bristol Bay. Star of Finland had sailed nearly three weeks before to the Alitak cannery and Star of Alaska was already out sixteen days on her annual trip to Chignik. Star of Lapland had sailed a month earlier to allow for a call in Puget Sound for supplies before proceeding on north. Only Star of Hollend of the active fleet remained, and she sailed three days behind Star of Falkland.

The passage made by *Star of Falkland* was completed in twenty-nine days. Where once, not many years before, there had been a dozen or more square-rigged ships at anchor, now only the late-arriving *Star of Holland* kept *Star of Falkland* company. A little more than two months were spent at anchor, and on 4 August Captain Widerstrom hove up anchor and was towed clear of the shoals at the entrance to Bristol Bay and set sail for Unimak Pass. Seventeen days out he arrived off the entrance to San

Francisco Bay with a pack of 35,234 cases of salmon.

The cargo was discharged into a shed and the empty Star of Falkland was towed back to Alameda and the company's dockyard. An idle and neglected-looking company of ships greeted her along the Channel. Some of the older cannery ships were gone after many years of good service. Across the channel on the Government Island mudflats rested more of the same old breed. Even Star of Falkland's sister, Dunsyre, was there, with her paint peeling away from the bare steel, and a dozen yards pointing off toward the sky in as many directions. The long road from the River Clyde had brought these two ships and many more like them to this corner of San Francisco Bay, to rub their bottom plates on the greasy mud of tidal basins or to tug at relentless moorings.

As she passed into the Estuary a long row of familiar-looking ships came into view, there on the starboard side. A stump topgallant full-rigger with 'Lasbek, Hamburg' lay alongside Dunsyre. She had arrived in this sailing ship's 'Fiddler's Green' only a year before, after a dreary and hopeless internment in Guaymas, Mexico, which lasted a dozen years. Close by was David Dollar. She was formerly Thielbek of Hamburg, a company sister of Star of Falkland's when they were owned by Knohr and

Burchard.

Old Robert Dollar had felt optimistic about the use of sailing ships shortly after the World War had ended and bought more than a dozen

of them, including that idle fleet in Santa Rosalia. Next to *Lasbek* was the big *Mae Dollar*, formerly *Adolf Vinnen* of Bremen. She had almost gone to sea, but couldn't get a profitable cargo. After seven years of idleness in the Gulf of California, she had been towed to San Francisco, Sausalito and finally Alameda, only to continue her long rest for another eight years.

Farther along was *Reinbek*—they didn't even bother to rename her and she didn't go to sea anymore. The big, four-mast bark alongside her there was *Mary Dollar*. Known as *Hans*, she too had swung on her anchor in Mexican waters for close to seven years, then came to San Francisco for another long lay-up.

Whatever hopes there had been for the use of sailing ships such as these were beginning to dim as *Star of Falkland* passed slowly up the Estuary to her winter quarters. Finally the tug shoved her into the narrow slip in Fortmann Basin and into an empty berth. *Star of Falkland* completed her last homecoming.

During the winter of 1927-1928 the Association spent \$1,264.00 for maintenance work, which included some painting of the hull and spars, overhauling sails, repairing the windlass, donkey engine, boiler, pumps and a special survey of the donkey boiler by Lloyd's surveyor.

Five ships were broken out for active service for the 1928 fishing season, Star of Falkland amongst them. Captain Widerstrom again assumed command, shifting to a San Francisco loading berth on 14 April. Eleven days later the ship was warped out of her berth and taken in tow for the shift through the Bay shipping, passed out through the Golden Gate late at night and dropped the pilot and tug off at the lightship. About 320 cannery hands and fishermen were aboard in addition to the usual cannery stores and supplies. Star of Falkland had been assigned to serve four canneries, three at the Naknek station and one at Ugashik, hence the large number of men on board.

Captain Widerstrom did not get off to a flying start. A smooth sea and light winds from the west-southwest greeted him soon after the pilot was safely delivered to the pilot schooner and the tug had returned inside. The Farallones' light bearing west blinked a warning and Captain Widerstrom set a course, for the time being, toward the south'ard to gain sea room and keep well clear of Point Reyes lying to the northwest. Within a few hours the wind dropped and left the ship rolling in a calm, but it soon afterward picked up again from the northwest. Off on a general southwesterly course went *Star of Falkland*, unable to gain much in latitude, but at least getting well clear of the land.

For a few days she remained in the latitude of the Golden Gate, but finally on 4 May was able to head up on a more northerly course. That day's run, figured up to noon, completed 230 miles, the best so far for a twenty-four-hour period. But for all of her tacking and sailing the ship was only 180 miles from San Francisco on 8 May, when thirteen days out.

From here on her luck changed, and the mileage stretched out in her wake as favorable winds sent her into colder latitudes. At 7:30 A.M. on 18 May the northeast end of Tigalda Island was sighted, bearing west 3/4 north magnetic, with the ship on a northwesterly course. Tigalda Island, one of the Krenitzin Island group, is located on the southwest side of Unimak Pass, the gateway from the Pacific into the Bering Sea. Through this pass went all of the sailing ships and other vessels bound for Bristol Bay canneries; its safe negotiation was of prime concern to all masters, not the least of whom were those men in command of the windjammers.

Within an hour and a half after sighting this island, Captain Widerstrom tacked ship toward the entrance to the Pass and watched for fair winds and favorable currents. After tacking again, Captain Widerstrom ordered the royals, topgallant sails, mains'l and outer jib furled for the night. With variable winds besetting him in the long summer twilight, he decided to wait for daylight before beginning the job of tacking

through Unimak Pass.

At 11:00 A.M. the next morning Scotch Cap on Unimak Island, marking the eastern limits of the Pass, bore northwest ½ west magnetic, while the ship lay steady on a south-southwest heading. A strong northwest breeze kept her from making a fast approach to the narrower waters of the Pass. At noon the position was 54-13 north, 164-39 west. Star of Falkland had made good only eight miles since the day before, but the Old Man's immediate task was not logging distance. Still the wind came from the northwest and Captain Widerstrom wore ship to port in the early afternoon, tacking to starboard at the change of the watch in the evening.

By early morning of the twentieth, the wind had backed a little toward the west. Captain Widerstrom ordered the spanker, inner jib and fore upper topsail set and hoped for the best, but the wind died away toward noon and the ship rolled in a moderate westerly swell. The day's run amounted to twenty-four miles made good, from her position of the pre-

vious day.

The next twenty-four hours were spent wearing and tacking *Star of Falkland* while the wind shifted but a little in its direction. If the ship could make some westing, just a few miles, and then bear up toward the north to leave Cape Sarichef on the starboard beam, the problem would

be solved. But by noon of the twenty-first *Star of Falkland* was three miles south of her previous noon position and well east of her position of the nineteenth.

All during the afternoon and evening of the twenty-first the ship was tacked and worn on various courses from north-northeast to southwest by west, making a little distance toward the west. Early in the morning of 22 May Captain Widerstrom brought his ship up to a course north by east, and set the mizzen topsail, outer jib, spanker and topgallant sail. This course was maintained all day long, with a little variation either way, until after 6 p.m. By this time the ship was close in under Scotch Cap on Unimak Island, and shortly after 6 p.m. the course was changed to west-southwest. Now with the ship in a good beginning position for the chance to get through, the wind shifted a little, coming from north-northwest. Star of Falkland was now able to maintain a course that would get her through the Pass and into the Bering Sea.

By this time, Star of Falkland had company in the form of four codfish schooners, all of which were trying to get through the Pass into the Bering Sea and up to the codfish banks. Captain 'Codfish' Kelly in Charles R. Wilson shortened down in the teeth of the nor'wester. The Anacortes schooner Azalea was likewise tacking back and forth, with the three-master Fanny Dutard, under Captain 'Squealer' Matheson and the San Francisco schooner City of Papeete keeping him company. At sundown of the twenty-second, Captain Kelly of Charles R. Wilson set all sail and made a try for the Pass, sailing close-hauled a few points closer to the wind than could the big, steel square-rigger.

Close-hauled on the starboard tack, *Star of Falkland* approached Akun Island, intending to leave its northeastern point on her port beam and thus be clear of any islands or obstructions that remained in the Pass. But she did not clear this last point. Shortly before 11 P.M. that night the wind died away and an ebbing tide threw her on submerged rocks on Akun Head, tearing some fatal holes in her bottom.

Captain Widerstrom's letter to the Association offers a description of this final episode in the career of the ship.

Gentlemen:

I regret to report the loss of the ship Star of Falkland which occurred on May 22 at

The *Star of Falkland* at the time of the disaster was in charge of the First Mate, Gustav Grausers. Grausers has been employed by the Alaska Packers Association for ten seasons in various capacities, five seasons of which were as First Mate on different vessels.

My instructions to the First Mate and officers on watch were that the ship's course

should not be changed without notifying me, nor should they tack the vessel without calling me.

At 9:35 PM I was called to the 'Tweendecks to investigate the condition of a sick

man who, in fact died of pneumonia before the ship struck.

About 10:35 PM I came on deck and found that the vessel had been tacked and was then on the port tack. Upon inquiry the Mate informed me that he had tacked the vessel without notifying me. Evidently the Mate did not get the yards braced around in time, as the vessel then was making sternway and the loom of the land was quite plain. The tide had also changed to ebb. I was surprised that this action had been taken. When I turned the vessel over to the Mate, we were well clear of the Pass with Akun Island about ten miles half abeam.

At 10:42 the vessel's stern struck on the Northeast point of Akun Island. The rudder was unshipped. I immediately let go the starboard anchor and locked the windlass to prevent the ship from sliding into deeper water, and ordered all men to come aft on the poop extension. An SOS was sent out and answered by the U S

Steamers *Unalga*, *Haida* and *Cedar*, and the APA steamer *Arctic*.

About fifteen minutes later I was notified that two Mexican foremen were preventing the Chinese from coming on deck, with guns. I disarmed the men, and the excuse they offered was that there were not sufficient lifeboats and the Chinese

were not worth saving anyway.

The vessel took a slide and dipped bow under, with the result that the water was in the Tweendecks as far aft as the mainmast, but the After Tweendecks was comparatively dry.

Sufficient boats were launched, without excitement, with the ship's boom, the

process taking fifteen to twenty minutes.

All men stayed on board until 3 AM on the 23rd at which time the U S Steamers Unalga, Haida, Cedar and the APA's steamer Arctic came in sight. The disembarcation of the men immediately began without confusion. The men were transferred in the ship's boats and also the boats of the Cedar, Unalga and Haida. With the exception of forty-eight men transported by the Haida to Naknek, the entire personnel were transported on the SS Arctic.

The men were well cared for on the SS Arctic and everything possible done for their comfort. The ship's stores consisting of blankets underwear, overalls, etc.,

were divided amongst the men.

The Star of Falkland was flooded on the main deck as far aft as the mainmast, and was hanging on a rock, the starboard anchor and chain holding her. It was considered unsafe for anyone to stay on board longer as in case the chain parted the vessel was very liable to slip off into deep water.

Thirteen men and myself left for the SS Arctic at 10 AM 23 May in a rough sea

and proceeded to Naknek on that vessel.

I am attaching hereto a chart of the vessel's position at the time she was turned

over to the Mate and I was called below.

Will further state that the occurrence was investigated by the U S Inspectors at Naknek. I have not been notified of the result of that investigation. However the Mate, Grausers assumed all responsibility for tacking the vessel and neglect in calling me.

Yours Respectfully (S) John Widerstrom

Captain A. H. Schulz was master of the company's steamer *Arctic* which made the rescue of the personnel from the wrecked ship. His account of the rescue following the wreck is as follows:

The Arctic was on her way to Bristol Bay when at 2300 on that fateful day I received an SOS from the Star of Falkland informing me that she was hard and fast on the rocks about 12 miles South of Akun Head in the northern part of Unimak Pass, and as our position was but 125 miles from the Pass, the Chief Engineer was instructed to maintain maximum speed and we arrived at the scene of the disaster at 1000 the following morning, with all boats ready to evacuate all cannery workers and the crew. On arriving we found that a large rock had pierced her bottom and she was resting easy and the water was rising and falling her in hold in accordance with the action of the tides. There was no one aboard and we were instructed by wire that all hands had been evacuated by the lighthouse tender Cedar a few hours previous to our arrival. The Cedar was anchored in a bay nearby. I proceeded alongside the Cedar and relieved her of all the crew and cannery hands (about 350 of them) of the wrecked vessel.

Before departing from the scene, however, we made a survey of the wreck and confirmed Captain Widerstrom's opinion that it would be useless to make an attempt to free her by trying to tow her off the rocks, as she would sink immediately if we would be successful in moving her. As far as salvaging the sails, gear or cargo that idea was abandoned since time was so essential as the canning operations would have to start within twenty days, and the factor that the *Arctic* was quite overcrowded with the additional 360 people. There were no casualties; one or two Chinese cannery hands succumbed to heart trouble. A couple of weeks later the tender *Kanak* was dispatched to salvage as much gear and equipment as possible, but it did not prove to be much of a success.¹¹ The inclement weather conditions prevented it, and shortly after that the wreck broke up.

Aside from the loss of *Star of Falkland*, the season of fishing and canning proceeded in routine fashion, and the catch of salmon was duly stowed in the holds of the two remaining sailing ships in Bristol Bay and steamers.¹² Homeward bound they went, through the treacherous Unimak Pass and into the broader reaches of the Pacific. The silhouette of *Star of Falkland* stood out against the rocky cliffs of Akun Island, her sails in tatters and the sound of dark water lapping against the cargo and empty bunks in the forward 'tween decks. It was August when the small parade of ships passed out, only two ships of sail now where there used to be dozens. Within a few short weeks the autumn storms claimed the remains of the big full-rigger, when she finally broke up and disappeared from human sight.

Captain Widerstrom was absolved from blame in the loss of his ship.

¹¹ A capstan from the ship is now located on the main floor of the San Francisco Maritime Museum, but it is believed this had been removed at some time during the ship's annual winter lay-ups. ¹² Star of Alaska was at Chignik and Star of England was in Alitak, both canneries located in the Gulf of Alaska.

The Steamboat Inspection Service, sitting at Juneau, advised him by letter of its decision.

In reply refer to File No. 2213. Office of Local Insp., Juneau, Alaska 30 August 1928

In the matter of the investigation into the loss of the sailing ship Star of Falkland of 2330 gross tons, at or about 10:42 PM May 22, 1928 on Akun Island on a voyage from San Francisco, California to Bristol Bay, Alaska.

Decision

Captain John Widerstrom 1960 Fulton Street San Francisco, California Sir:

In the matter of the investigation, held before this Board 24 July 1928, into the loss of the sailing ship Star of Falkland, said vessel being under your command, at or about 10:42 PM 22 May 1928, on Akun Island on a voyage from San Francisco.

California to Bristol Bay, Alaska.

After carefully considering the evidence we are convinced that the vessel was lost through no fault of the master who was the only licensed man on board. It would appear, according to the evidence submitted by the acting mate and seaman on watch at the wheel, that the weather was such that objects could not be seen at any great distance owing to foggy weather and cross currents. Upon tacking ship and having gained considerable stern way, the wind was not of sufficient strength to gather headway to avoid striking the beach. No lives being lost as a result of the ground, under the circumstances we prefer no charges against the master, and case is hereby dismissed.

The estimated loss of the ship and cargo is \$50,000.00.

(S) George Tyler U S Assistant Inspector of Hulls, Acting for Local Inspector

(S) John Newmaker U S Local Inspector of Boilers.

This decision brought the affairs of *Star of Falkland* toward a close. Within two years Captain Widerstrom died at his San Francisco home, and in the same year the Alaska Packers Association ended forever the use of sailing ships in their trade to Alaska. The dark waters of the Bering Sea had claimed their last square-rigged victim and another era of sailing ship operation in the Pacific was done. The road from the River Clyde to Unimak Pass had been a long one for the ship *Durbridge*.

Harold Huycke is a West Coast seaman who has contributed the histories of several of the Alaska Packers' fleet to Neptune.

Memories of Steamboat Days on the Hudson 1884 to 1907

BY A. FRED SAUNDERS

HE earliest memories of my childhood days seem to start with a trip up the Hudson River on a steamboat in the summer of 1884. We were living in Brooklyn at the time and my parents decided to vacation in the Catskills, so we went there by steamboat. Thus started my lifelong fondness for steamboating.

Never shall I forget my first steamboat trip up the river to Catskill on the Day Liner *Chauncey Vibbard*. It opened up a new world of interest to a Brooklyn boy who, until that day, had never been farther from home than a ride on the steamcars to Brighton Beach or a day in Prospect Park.

A steamboat trip up the Hudson River in the middle eighties was quite an undertaking for a Brooklyn family. If the trip was to be made by day-light, it required getting up about 5:30 in the morning; a long horsecar ride to the foot of Fulton Street, and a trip on the steam ferryboat *Annex* down the East River, around the lower end of Manhattan Island and up the North River to the Albany Day Line pier at the foot of Vestry Street, New York.

Annex was a great convenience for Brooklynites as it saved them crossing the new Brooklyn Bridge on the cable cars, also a long tedious horse-car ride through the traffic-congested streets of lower New York City.

Traveling by steamboat was a most pleasant, interesting, and economical means of getting places. It brought you into close contact with your fellow travelers, and an unusual spirit of friendliness seemed always to prevail among the passengers. Many a romance had its beginning on a steamboat trip. Then, too, there were always so many things to see on a steamboat trip. The beauties of the river spread out as a huge panorama, the ever-changing scenery, the long and picturesque tows of canalboats, offering one a glimpse of domestic life afloat, and, also, there were the many novel and interesting features aboard the steamboat itself, all of

which contributed to the comfort, pleasure, and entertainment of the passengers.

For size, speed, and fine appointments, the Hudson River boats, especially the steamers of the Day Line, built exclusively for passenger service, were unsurpassed by any other inland river steamboats in the world.

The daily running time of nine and a half hours over the hundred and fifty miles between New York and Albany, including eight stops at way-landings, was so regularly maintained that people set their clocks by the Day boats.

The Hudson River passenger steamboats of those days were beautifully furnished and were models of cleanliness and efficient service. The Day boats were designed and operated for the comfort and pleasure of people who appreciate fine things, even in steamboats. These boats were noted for their spacious dining saloons with excellent cuisine; situated on the main deck aft, and lined with windows so numerous and large as to afford the passengers, while dining, an unobstructed view of the river scenery. The table d'hote dinners so well served by courteous and smiling white-coated darky waiters will long be remembered by those who traveled the Hudson by daylight. To add further to the pleasures of the trip, programs of popular music were rendered by the fine orchestras of William J. Holden of Albany and Colonel Sinn's Park Theatre of Brooklyn.

Each spring about Memorial Day time when the pink bloom of the mountain laurel added its touch of color to the Highlands, some thoughtful soul with an eye for beauty, decorated the dining saloon with sprays of this lovely shrub, and again in the fall with branches and sprays of gorgeous autumn foliage. Was it any wonder that the Day boats were so

popular?

I can well imagine the feelings of pride and satisfaction Commodore Van Santvoord, founder of the Day Line, must have enjoyed whenever these fine steamboats passed him on the river and saluted with their cheery whistle, as he admired them from the deck of his unique and handsome paddle-wheel steam yacht *Clermont*, one of the very few side-

wheel vachts having a vertical beam engine.

As I remember them, the largest and most popular steamboats in service on the Hudson, between 1884 and 1907, were Chauncey Vibbard, New York, Albany 2nd, Hendrick Hudson of the Hudson River Day Line; and the night boats St. John, Drew, Dean Richmond, Adirondack, and C. W. Morse of the Peoples Line to Albany; City of Troy and Saratoga of the Citizens Line to Troy. James W. Baldwin, City of Kingston, and Wm. F. Romer of the Kingston Line; Kaaterskill, Onteora, Catskill, and Walter

Brett of the Catskill Evening Line; Saugerties, Ida, and Ulster of the Saugerties Line; Daniel S. Miller and John L. Hasbrouck of the Poughkeepsie Line; Homer Ramsdell and Newburgh of the Newburgh Line; and, most famous of all, Mary Powell, by public acclaim the Queen of the Hudson. This beautiful popular boat made the daily passage of ninety miles each way, down in the morning, up in the afternoon, between Rondout and New York City. She was withdrawn from river service after the season of 1917. When she was finally broken up, the news caused many heart twinges among the older residents of the Hudson Valley.

With but few exceptions, the Hudson River steamboats were sidewheelers, and most of those built before the turn of the century were of the paddle-box type. The big, half-round wheelboxes with the name of the boat painted in bold lettering across the front, were often masterpieces of decorative design in open panelwork which radiated from the center over the name like a setting sun. Touches of gold paint also added to the picturesqueness.

Another interesting feature was the diamond-shaped walking beam with its up and down motion as it transmitted the driving power from the engine to the big paddle wheels, some of which were as large as forty feet in diameter.

Most of the boats had two tall black smokestacks ranged athwart ship. The Day Liners boasted three stacks painted in buff color. On pleasant days there was a gay array of many colored flags snapping in the cool river breeze, and at night the myriad of twinkling lights reflected on the rippling water as the boat steamed along made a beautiful sight. The older steamboats such as Mary Powell, Saratoga, City of Troy, St. John, Drew, James W. Baldwin, and Dean Richmond carried their boilers on the guards aft of the paddle boxes. At night when the furnace doors were thrown open to receive fuel, great shafts of light streamed across the water and the bodies of the stokers silhouetted in the glare of the fiery furnace formed a weird picture; on a still night the soft splash of the paddle wheels and the drone of the engine could be heard a mile inland. Even the deep-throated steam whistles, particularly those on the Day boats, had a distinctive musical tone that echoed and re-echoed from the hillsides as the boat passed through the narrows of the Highlands. A most unique sound feature aboard these river boats was produced by a whitecoated colored waiter who paraded up and down the main deck at meal times, striking a large oval tin serving tray which made a deep rumbling sound reminiscent of distant thunder. This never failed to start a rush of hungry passengers for the dining saloon, where a fine table d'hote dinner was served for the sum of one dollar, or breakfast at fifty cents.

By far the most interesting and fascinating part of a steamboat, especially for the youngster, was the spotlessly clean engine room enclosed in glass so that the passengers could see for themselves what made the boat go. Here was the shiny steel and brass beam engine with its numerous working parts moving up and down, back and forth, the hiss of steam in the big steam chests, the very air alive with motion, and over all the blue-coated engineer and his assistant, their vigilant eyes ever on the row of steam gauges.

There was a big brass-bound clock in the middle, upon which was perched a shiny gold eagle; under this array was a metal plate inscribed with the names of the builders. Two name plates that stand out in my memory were W. & A. Fletcher Co., New York, and Harlan & Hollingsworth Co., Wilmington, Delaware, in the engine rooms of New York and Albany, my favorite steamboats. Back of the engine room was a long enclosed space with several openings in its wall, through which could be seen the huge gallows frame supporting the walking beam. How well I remember it. Here, too, was the big cylinder with its piston rod transmitting the power of the engine, through the beam, to the paddle wheels. Nearby, was the air vacuum pump. and on each side the odd-shaped eccentric cams and rods moving up and down, back and forth, but most impressive of all was the big, swiftly revolving crank, that turned the paddle wheels.

What a great thrill it always gave me to watch the oiler, in making his rounds, step across the open space in which the crank revolved. He had about three seconds, between revolutions, in which to clear it. I often

thought, what if he were to miss?

The long wheel shaft extended across the main deck to the paddle wheels on each side of the boat. It was about four feet above the floor and was provided with cross-over steps; few people ever used them as it was easier to duck under the shaft than climb over.

As a small boy, I thought it great fun to stand under the big wheel shaft on the Day boat, holding my upraised hands against the cool surface of

the revolving metal.

Now a word for the men who presided over the engine room. To the mind of a boy the engineer was just about the most important personage aboard the boat, and he was right—how far could the boat go with a broken-down engine? The big part of the engineer's responsibility was to keep his engine in perfect working order at all times. That he did his job well can be attested to by the fast running time made by the boats,

and regularity with which the time schedules were maintained from year to year. Yes, sir! The engineer of a steamboat had much more on his mind than watching the steam gauges and leaning on a starting bar.

In the eighties and nineties, most of the passengers on the Day boats were vacationists bound for the many summer hotels and boardinghouses in the Catskills, and they all traveled with trunks—the number depending on the size of the family. My mother would begin packing our big Saratoga a week before we started on the trip to Catskill; and what an exciting day it was for my sister and me, when the Wescott Express arrived to start our trunk on its way to the country!

When the boat landed us at Catskill, I was always interested in watching the crew unload the hundreds of trunks. The men would form a long line with a trunk between each two men. When the signal was given, the line would start moving across the gangplank to the dock, where, in succession, the two lead men would drop their trunk and run back to take their places at the rear end of the line. Thus there was a continuous line of trunks moving onto the dock. It was a strenuous job for the crew as many of the trunks weighed well over a hundred pounds.

At the peak of the summer season, it was not unusual on Fridays and Saturdays for the northbound Day boat to land from five to eight hundred passengers at both Kingston Point and Catskill, where the trains of the Ulster and Delaware Railroad, and the Catskill Mountain Railway would take them to the mountain resorts.

The night boats left New York at six o'clock in the evening and made an interesting and novel sight as they headed up the river in a long line, the larger boats usually leading the fleet. By the time Haverstraw Bay was reached, and darkness had fallen, the big boats were far ahead with their numerous lights twinkling on the water.

As the night boats were designed to carry both freight and passengers, they did not have the graceful lines, trimness, or deck room of the Day boats, but they had unique structural features that presented a distinctive picturesqueness when steaming along the river.

The big boats had huge paddle boxes of openwork design, arched hog frames to support the weight of the engine and boilers, tall black smoke-stacks towering above the boilers mounted on the guards aft of the paddle boxes and the bow flagstaff had a big black ball halfway up its length to guide the pilot at night in keeping the bow of the boat headed in the right direction. Several of the boats had a big gold eagle atop the pilothouse and all of them carried a ship's bell, which was rung loudly for some minutes before the time of departure, to announce that the boat

was ready to start shortly. When the river was fogbound and the boat had to stop and anchor, the bell was tolled as a warning signal. Many a foggy morning have I lain in my berth listening to this doleful sound.

The interior decorations and furnishings on the big night boats were often unique examples of sumptuousness. Most of the second and third decks were devoted to the grand saloon with its high-domed ceiling supported by tall columns of the classic orders, and lighted by huge gas chandeliers. Wide staircases, fore and aft, led to an upper tier of staterooms opening in upon a balcony encircling the saloon. Heavy pile carpets covered the floor and stairs, and the richly carved furniture was upholstered in dark blue or red plush.

The staterooms were fitted with an upper and lower berth, a corner washstand with a big white china washbowl and pitcher filled with cold water, also a commode. Several of the big boats boasted bridal chambers, larger rooms with real beds. This luxury in steamboat travel cost five dollars extra, and provided the services of a colored stewardess.

If you retired early and were a light sleeper, the chances were ten to one that you were kept awake until well after midnight by the tramping of feet on the hurricane deck above you, or by some giggling spooners

outside your slatted window.

The smaller boats, such as those of the Catskill Line, provided two kinds of sleeping accommodations, staterooms on the upper deck, and curtained cabin berths in the dining saloon below decks. The cabin berths were ranged in tiers along the side walls and had draw curtains, Pullman fashion. A cabin berth cost only 25 cents but imposed certain restrictions which limited one's hours for sleeping. You could not retire until after the evening meal was finished and the long table in the center of the saloon cleared away and set for breakfast. The berths were usually ready by ten o'clock and you were lulled to sleep by the splash of the paddle wheels, the vibration from the engine, and the crooning of the darky waiters in their quarters. Promptly at 5:30 A.M. the cabin sleepers were routed out to make room for the activities of breakfast at 6:00 A.M.

When the berry and fruit seasons arrived, the night boats reaped their part of the harvest, as the bulk of the fruit raised along the Hudson Valley was shipped to New York by boat. The Catskill and Saugerties boats enjoyed a large share of this freight business as between them they stopped at every way landing along the river from Coxsackie to Malden. There was lots of thumping and bumping as the boat's crew trucked the hundreds of crates or barrels up the gangplank and across the deck. As this activity lasted well into the night the passengers heaved a sigh of relief

when the last barrel was stowed, the gangplank drawn aboard, and a sharp toot of the steam whistle gave final notice that the boat was, at long last, ready to resume her trip to the Big City.

About the homeliest pair of steamboats to be seen on the river were the screw propellers William C. Red field and Thomas McManus. These two boats were the tail end of the Catskill Evening Line fleet. When southbound they were usually loaded with sheep and horses for the big city, and while they had passenger accommodations of a sort, between the thumping of the propeller, the baa-baa of the sheep and the stomping of the horses, unless the passengers were sound sleepers, they did not get much rest on the trip.

Any mention of old *Red field* brings to mind a most uncomfortable trip my wife and I made on this boat from New York to Hudson in the late fall of 1899. It was a cold, blustery night; there were few passengers aboard. About midnight we were suddenly awakened by loud voices and a great commotion going on below decks. We were too scared to open our stateroom door. Things quieted down in about a half hour, and we finally fell asleep. The next morning we learned that an oil lamp had exploded in the crew's quarters. A narrow escape for those aboard!

Despite the annoyances, traveling on the old night boats was a lot of fun. A moonlight night on the Hudson is a marvelous sight at any time or place, but when viewed from the hurricane deck of a steamboat in the good old summertime, it was about the most enchanting and romantic place imaginable—at least the young folks of the 'Gay Nineties' thought so.

Now a word about the men who piloted the Hudson River steamboats in fair weather and foul. It called for lots of skill and good judgment, also a thorough knowledge of the river under its constantly changing conditions. To steer a big side-wheel steamboat through the winding narrows of the Highlands, especially in the dark of a stormy night; to keep her clear of the mud banks of the Overslaugh above Castleton when bucking an ebbing tide on a foggy morning; or to clear safely a long tow of canalboats in a narrow stretch of the river on a misty day, required skill of the highest order.

Well do I remember several early spring trips up the river on old *Catskill* and *Walter Brett* when we were passing through blinding snow squalls most of the way, or nights so dark one could not distinguish an object a hundred feet ahead. How the pilot could find his ranges on such nights was always a mystery to me.

One of the greatest thrills of my boyhood days was being permitted to

spend an hour, one evening, in the pilothouse of *Kaaterskill* on her down-river trip from Catskill to New York.

I remember my surprise, when darkness settled over the river, to find that the formation of the shores could be seen quite clearly from the pilothouse. Soon, a dim cluster of lights appeared ahead in the far distance: as we drew nearer, they became larger and brighter and they began to separate and spread out with some red and green lights in the center. I was so fascinated with the ever changing scene that I did not see the pilot reach for the whistle cord. Suddenly the quiet of the pilothouse was shattered by two sharp blasts of *Kaaterskill's* whistle. I was so startled I nearly fell off my stool. The pilot then rang the engine room for half speed, as required of all steamboats when passing a tow on the river. In a few moments back came an answering signal from the direction of the lights.

Soon, we were passing a long fleet of canalboats and ice barges under tow of the big side-wheeler *Oswego*, and a helper tug. What a medley of homely sounds came to our ears from this floating community. First, the splash of the paddle wheels, and the singing drone of the engine on the towboat. Then, came the notes of an accordian and a mouth organ, snatches of song, crying children, dogs barking, the braying and stomping of mules, the squeak of bilge pumps, the creaking sound of whirling wind-mills on the ice barges, and the gurgling of swirling water around the mass of slowly moving boats. As they faded into the distance, I became aware of my father's voice bidding Captain Ruton 'good night,' then he took my hand and we went below to our stateroom, where I was soon dreaming of big towboats and floating windmills.

It took from five to six days for one of these tows to make the trip down the river from Albany to New York. The progress was slow, but this slow time was offset by the size of the tow, which usually was made up of from forty to eighty boats. Some of the towboats that pulled these immense tows up and down the river were old side-wheel passenger steamers, rebuilt and adapted for the purpose, by removing most of the upper works, saloons, and staterooms. The names of many of these towboats were familiar to people from upstate. The boats I remember best were Syracuse, Niagara, Oswego, Norwich, and Ontario, along with A. B. Valentine, America, General McDonald, Silas O. Pierce, and Anna.

The old side-wheel towboats were always of great interest to me. Many times, in the nineties and early nineteen hundreds, have I paddled a canoe out of Stockport Creek to meet a passing tow on the river, following along with it for a mile or so just to watch the towboats at work.

Norwich, built in 1836, was an unusually staunch boat, known on the upper river as *Ice King* because she was used as an icebreaker in the early spring when the upper reaches of the river were usually icebound. *Norwich* was the oldest steamboat on the river in 1909 when she led the flotilla of river craft in the Hudson-Fulton Celebration.

One did not have to travel very far on the Hudson River between New York and Albany in the eighteen eighties and nineties to see steamboats of one kind or another. There were side-wheelers and screw propellers, one-stackers, two-stackers, and three-stackers; there were Day boats and

night boats, towboats and ferryboats of all sizes.

The large and beautiful passenger steamers such as Mary Powell, New York, and Albany of the Day Line, and the big boats of the night lines were the pride of the river, and far more familiar to the traveling public than the many smaller steamboats that provided local freight and passenger service between the small towns and hamlets along the river. These boats, including the steam ferries, were a great convenience furnishing cheap and regular service during the entire season that the river was open to navigation.

Jacob H. Tremper and Milton Martin were smart little boats of the paddle-box type. They had one tall black smokestack located just aft of the pilothouse. They were designed for freight carriers but had ample deck room and comfortable cabin accommodations for passengers. To the old-timers along the river they were affectionately known as the 'Beer Boats,' because they distributed Dobler's 'Albany' brew down through the valley. Tremper left Albany and Martin left Newburgh weekdays at seven in the morning. Their usual landings were Castleton, New Baltimore, Stuyvesant, Coxsackie, Stockport, Hudson, Catskill, Germantown, Malden, Saugerties, Tivoli, Rhinebeck, Rondout, Poughkeepsie, Milton, New Hamburg, Fishkill, Newburgh.

Whenever I become reminiscent of the old days on the Hudson River, Tremper and Martin seem always to appear in the picture, steaming along with a bone in their teeth, smoke trailing from the smokestack and a wide foaming wake on the water astern, then suddenly three sharp blasts coming from the steam whistle to signal the approach to a landing. When the southbound boat came into the dock at Catskill, you knew it was noon.

City of Hudson, another old-timer, somewhat larger than Tremper, made a round trip daily between Hudson and Albany. Up in the early morning, down in the afternoon, landing at Stockport, Coxsackie, New Baltimore, Castleton, Albany. This service was very convenient for the

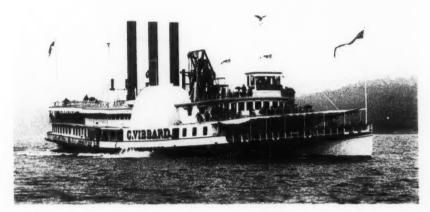
ladies living in the small villages along the route who wished to do some shopping in the capital city and be home by supportime. *City of Hudson* was destroyed by fire at Catskill Point in the early nineties.

Another smart little side-wheel steamboat was named *Emeline*. This boat was popular with the volunteer fire companies along the upper river as they usually chartered *Emeline* to carry them to the Tri-County Firemen's Conventions, the 'Big Event' of the year back in the nineties.

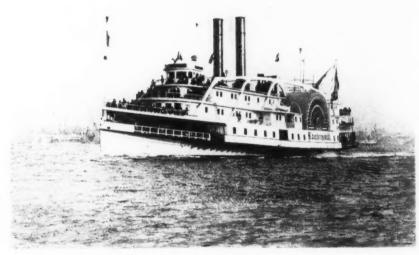
On 5 October 1892 Emeline came to grief in Catskill Creek. As I remember the incident, this is what happened. In the evening of the last day of the celebration, *Emeline* loaded to her rails with departing members of the Young America Hose Co, and Niagara Steamer Co, of Poughkeepsie, and the Eagle Engine Co. of Hyde Park, with their bands of music. pulled away from the steamboat dock below the town bridge, amid the farewell cheers of a large crowd of spectators along the shore. As the steamer rounded the Hop O' Nose, a high mass of rock jutting out from the wooded shore off her starboard side, she struck a sunken spur of rock, ripping a hole in her bow. The panic-stricken passengers crowded to the port side of the boat causing her to list so badly that she soon filled and sank. Those on the nearby shore ran to Benter's Boat Livery, using his fleet of rowboats to form a pontoon bridge over which most of the passengers scrambled safely ashore. Others were taken aboard the steamer Whitney bound out of the creek with the fire laddies from Coxsackie. Fortunately no one was seriously injured, but those on the main deck got an awful wetting, much to the amusement of the cheering spectators ashore. Several days later the steam derrick Reliance raised Emeline and she was back in service the next season as good as ever.

Another interesting and picturesque feature of travel on the Hudson was the ferryboat, especially the old-timers on the upper river. At one time or another, during the late nineties and early nineteen hundreds I crossed the river on all of the ferry lines from the Fort Lee ferry line out of 129th Street in Manhattan all the way up to the Coxsackie-Newton Hook line, which was the most northerly ferry that traversed the river between Albany and New York City. I remember the boats, then in service, very clearly, especially those on the river above Poughkeepsic.

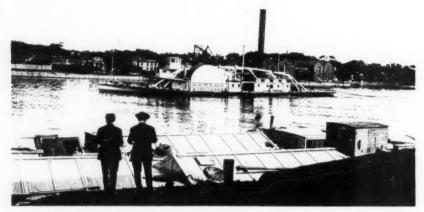
All the steam ferryboats on the river were side-wheelers and some of them were among the oldest steamboats still in service at the beginning of the present century. Before Kingston Point came on the map in 1896, the Day Line steamers landed at Rhinebeck, and a steam ferryboat named Transport transferred the passengers bound for the mountain resorts across the river to the waiting trains of the Ulster and Delaware Railroad



Hudson River day liner, Channey Vibbard, 1864-1899 Photograph courtest of R. Loren Graham



Catskill evening liner Kaaterskill, 1882-1913 Photograph courtesy of Catskill Daily Mail



Hudson River towhoat, Oswego, 1818-1920 Photograph courses of Stranship Historical Society



Catskill-Greendale ferryboat, A. F. Beach, 1878-1936 Photograph numbers of F. Van Loon Ryder

at Rondout. This ferryboat, built in 1872, put in sixty-three years of service, of which fifty-seven years were on the Rhinebeck-Rondout run.

The most unique and picturesque ferryboat on the river was old *Air Line* which ran from Saugerties to Tivoli. Built in 1857, she was one of the early walking-beam ferries, and had the distinction of being the only ferryboat on the Hudson having a single bow; she had to turn completely around after each crossing. Along each side of the boat were long narrow cabins, with open alleyways separated by the long enginehouse. A single octagon-shaped pilothouse was perched atop the foreward end of the enginehouse, and directly aft, was the narrow bar walking beam. The tall black smokestack was in the middle of the boat. She was painted white, as all ferryboats were in the early days.

Her first Captain, John M. Burnett, ran the boat for thirty years; Captain Charles Taylor for the next twenty-two years before he died, when Captain George Mower took over and finished up her long career. The old *Air Line* deserved a better fate than the scrap heap. This curious old-timer was always of great interest to me and when in Catskill I would sometimes take the little propeller *Herman Livingston* to Saugerties just to make a round trip on *Air Line*.

A. F. Beach, familiar to several generations of Catskillians, supplied ferry service between Catskill Point and Catskill Station, later Greendale. She was on this route in 1884 when I first came up the river and she was still running in 1935, the last time I crossed the river on her.

Beach was always a most welcome sight to central passengers bound for Catskill, especially when they arrived by train on a cold, blustery night in the late fall. When Beach arrived in her slip at the Point (I am speaking of the nineties), village constable Joe Reilly was sure to be on hand to look the people over as they came ashore. Joe was a faithful guardian of the peace.

Another old-time ferryboat was *George H. Power*, which ran between Hudson and Athens. *Power* had the longest and, in rough weather, the toughest ferry trip on the upper river. In those days her route was down the east channel around the Middle Ground and Hudson light, then up the west channel to Athens, where she was built in 1869. After fifty-two years of service on the Hudson, this ferryboat finished her days on Lake Champlain under the name *Charlotte-Essex*.

Cossackie provided ferry service between Cossackie and Nutten Hook, or Newton Hook, as the name was spelled on the way station of the Hudson River R.R.; though most of the older residents along the river preferred the original Dutch spelling—Nutten Hook (Nut Tree Point). The

ferryboat *Coxsackie* was affectionately called 'Old Ham and Egg' by the villagers. No one seems to know the origin of this nickname. *Coxsackie* put in fifty years of service on the river from 1878 to 1929. Captain Charles Van Slyke and engineer, Alex Vinning, were in command when I made my last trip on the old boat in 1920.

At the time this is written (1956), there are still two steamboats left on the river—the side-wheeler *Alexander Hamilton* and the propeller *Peter Stuyvesant* of the Hudson River Day Line, Inc. They survive, like a ghostly shadow of the great fleet of steamboats that preceded them.

With the passing of the old-time steamboats, the river has lost one of its most interesting and picturesque features.

A. Fred Saunders is a native of Brooklyn, New York, where he resided until 1907, when he moved to Syracuse, New York. He is a Pratt graduate in design. He has been associated with the silverware industry, as a designer since 1892.

Notes

THE ORIGIN AND DIFFUSION OF OCULI

In his continuation of our debate on the subject of boat oculi, Professor Ouigley says that I was greatly agitated by his first criticism and that numerous letters were exchanged through the Editor.3 His present effort certainly has not assuaged this agitation. I originally objected strongly in several letters to being repeatedly misquoted. It was my intent to keep the majority of such arguments, which can become rather acrimonious, off of the printed page. However, Professor Quigley insists on arguing these points in print. In my rejoinder to Professor Quigley's original criticism I objected to his most serious misquotation; I certainly never stated or even implied that the Romans invented the boat oculus. Professor Quigley now pinpoints six places in my original article where he states that I say oculi [in general] have a 'Roman origin.' It will be well to quote the sentences from which he has taken words 'Roman origin.'

1. 'It is thus extremely pertinent that the bow patches in India (some are rectangular, others triangular) are either red or black. This is certainly strong evidence in favor of a Roman origin." Since oculi are not mentioned in either of these two sentences, or the whole paragraph, Roman origin obviously refers to 'bow patches.'

2. 'While a degeneration of the oculus from an original Egyptian prototype such as Hornell suggests is possible, the weight of the surrounding evidence favors a Roman origin.' 3 Since the first sentence of this paragraph mentions 'an ancient Egyptian origin of Indian oculi,' Roman origin obviously refers to Indian oculi.

9. 'The complex of the red field, the oculus and the coiled stemhead together would seem to form conclusive evidence for the Roman origin of the Indian oculus.' 4

4. 'There is just one weak link in a hypothesis of a Roman origin of the triangle-and-oculus found in the western Indian Ocean.'

5. 'It is the triangle which shows the common Roman origin of all such de-

6. The similarity of decoration of this Sicilian boat with a Roman vessel is further evidence for a Roman origin of such designs found in the Mediterranean.' 7 This obviously refers to the decorated patches of the modern Sicilian boats shown in Fig. 10, and the Roman merchantman shown in Fig. 11.

Thus in summary these instances refer three times to decorated patches, two times to the Indian oculus, and once to the triangle-and-oculus. But this does not stop Professor Quigley from maintaining that they all say that oculi in general have a Roman origin. He states that "The use of the word "origin" to mean the diffusor rather than the originator would constitute a misuse of the word,' and therefore that it is clear that I originally 'implied that the Romans originated (that is, invented) the oculus.' 8 However, if we look at Professor Quiglev's original criticism we see that he has repeatedly used 'origin' in the sense of diffusion. He refers to an 'argument that

¹ C. Quigley, 'Origin and Diffusion of Oculi,' AMERICAN NEPTUNE, XVIII (1958), 25-58.

² R. L. Bowen, Jr., 'Maritime Superstitions of the Arabs,' American Neptune, XV (1955), 20.

a Ibid., p. 21.

⁴ Ibid., p. 22. 5 Ibid., p. 24.

⁶ Ibid., p. 24.

⁷ Ibid., p. 36.

⁸ C. Quigley, op. cit., p. 26.

the Indian combination [of patch and oculus] must be of Roman origin.' 9 Later he says that 'This is supported by the fact that Greek maritime techniques and ships were based on Phoenician (that is Semitic) origins while Roman ships were based on Carthaginian (that is Phoenician colonial) origins.' 10 Technically Professor Quigley may have misused the word 'origin,' but no fair reader could argue that he was saving that either the Phoenicians or the Carthaginians invented the ship. Therefore, since Professor Quigley used the word 'origin' in the same manner that I (and many others) have indicates that he should have had no difficulty in understanding what the six passages he referred to meant: they say that the Romans spread (diffiused) the charactertistics mentioned. Since he himself uses 'origin' in this manner, all of his arguments on this subject obviously make no sense.

Professor Quigley spends most of the first sixteen pages of his recent effort in attempting to impose upon me a belief that Latin-speaking persons took the oculus to India. He bases this on the first eight pages of my rejoinder. Again Professor Quigley grossly misquotes me. Without going into great detail, I will give a few lines from these very pages to show that I hold that Greek-speaking Roman subjects from Egypt were probably sailing ships to India, not Latin-speaking Romans.

1. '. . . Greek-speaking Roman subjects sailed ships to India. . . ' 13

2. '. . . an enormous trade between India and the West in the hands of the Alexandrian merchants.' 14

 9 C. Quigley, American Neptune, XV (1955), 194.

10 Ibid., p. 195.

11 C. Quigley, American Neptune, XVIII (1958), 25-40.

¹² R. L. Bowen, Jr., AMERICAN NEPTUNE, XVII (1957), 262-269.

13 Ibid., p. 265.

14 Ibid.

3. A type of Roman ship 'was used by the Alexandrian merchants in their trade with India.' 15

4. 'However, these ships were probably owned and sailed to India by Roman subjects, probably Greeks.' 16

5. The artemon 'was copied from ships used by the merchants of Alexandria in the Indian trade in the first and second centuries A.D.' 17

6. The occurrence of this artemon mast in ancient India provides the only evidence indicating that ships of Roman type were used in the Indian trade by

Egyptian merchants.' 18 This certainly does not look as if I said that Latin-speaking Romans sailed ships to India. By attempting to distort what I have written to such an extent, Professor Quigley destroys any valid arguments which he might have in the first part of his article. After asserting that I maintained that Latin speakers sailed ships to India, he tries to give the impression that he is providing the correct answer to the question: namely that Western ships were sailed to India by Alexandrian merchants.19 This is exactly what I have said in the six instances quoted above. These come, incidentally, from the 'twenty-three paragraphs' he maintains I devote to showing 'that the Romans did take the oculus to India, themselves.' 20

Throughout his latest effort, Professor Quigley has frequently made false statements of facts. Some of these are apparently due to the fact that he has difficulty in properly appraising the ancient evidence for watercraft. We will now consider the most obvious of these factual errors.

1. Professor Quigley states that my

¹⁵ Ibid., p. 267.

¹⁶ Ibid., p. 268.

¹⁷ Ibid., p. 26g.

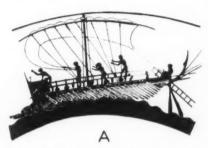
¹⁸ Ibid.

¹⁹ C. Quigley, op. cit., p. 38.

²⁰ Ibid., p. 28, n. 13.

carclessness in writing is 'almost unbelievable.' 21 One example of this is my 'improper' use of the word origin. As another example he states that I refer 'to a small, graceful, oarless, one-man sailing craft illustrated in Moll as a "galley," which it surely is not.' 22 Since such a point cannot be proved without injecting one's opinions, I wrote to Professor Lionel Casson, an authority on Greek maritime matters, and asked for his comments on whether or not the craft was a galley. He writes:

an oculus is placed on a colored patch at the end of a boat. The reference which Professor Quigley gives for the occurrence of an oculus on a colored patch shows no such thing. It will be necessary to reproduce these two boats here since they have a most important bearing on the whole argument (Fig. 1).24 One of these is a galley (Fig. 1-A), and the other is a merchantman (Fig. 1-B). We have many other representations of galleys, but this is the only illustration of a Greek merchantman which has come



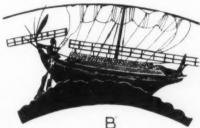


Fig. 1. A, Greek galley. B, Greek merchantman. Both of these boats are from the same vase The galley shows the classical rostra, or beak, in the conventional manner as a boar's head with snoot, eyes, and ears plainly visible. The me chantman has a single small oculus at the bow on an otherwise completely black hull. The two diagonal lines in back of this oculus may represent a heavy rope around the bow for making the forestay fast.

British Museum.

I do not see how it could be anything else but a galley. Except for the proportions, it is exactly like the galleys on the 6th century B.C. black vases. The absence of oars is a silly objection. For one thing, galleys must have travelled under sail alone very often and, for another, the artist of this vase is far more interested in the aesthetics of his composition than he is in imitating reality.

2. Professor Quigley states that I did

down to us. Professor Quigley states that both of these boats have 'oculi enclosed in triangular areas."

Let us consider the galley first (Fig. 1-A). Here we see low on the water the classical rostra, or beak. This is shown in the conventional manner as a boar's

not know the Greeks placed oculi on triangular patches until I was provided with the evidence in a letter he wrote Mr. Dodge.23 This is not true. I still know of no instances in Greek art where

21 Department of Greek and Roman Antiquities, A Guide to the Exhibition Illustrating Greek and Roman Life (London: British Museum, 1920), pp. 34-35. Better illustrations of these two boats, which happen to be found on the same vase, are to be found in C. Torr, Ancient Ships (Cambridge: University Press, 1895), pl. 4: 17 & 18. Torr's illustration is a half-tone, while the British Museum illustrations were presumably modified from these to line cuts. I take Torr's renderings to be the more accurate; they do not show the same coloring on the gunwale of the merchant ship. However, the original does not show a double bank of oars at the stern of the galley.

²¹ Ibid., p. 26.

²² Ibid. The boat in question is very similar to the boat shown in Fig. 1-A here, which has always been described as a 'galley.'

²³ Ibid., pp. 27, 43.

head with snoot, eyes, and ears plainly visible. It is this combination which Professor Quigley interprets as an oculus enclosed in a triangular area. Such an interpretation is not acceptable, for we have several examples of these beaks preserved in the round, and they are quite clearly bronze boars' heads. Hornell has pointed out that the oculus often placed on a boat bow did not come from the eve of the boar's head, for this oculus often occurs in addition to the boar's eve, which is sometimes stylized without the details of the head (Fig. 2). 25 In the merchantman there is a single small oculus at the bow on an otherwise com-

statue of Isis found by an achaeological expedition to South Arabia of which I was a member, Professor Quigley states that my writing is an insult to scholarship for three reasons.26 The first of these is misquoted and obviously ignores several pages of discussion of Isis some seven pages before. The second states that 'the fact that Isis, as an Egyptian deity, was known to South Arabians centuries earlier than the Romans or Greeks is ignored.' I must ask that he provide proof of this last statement. Professor W. F. Albright, chief archaeologist of the expedition which discovered the statue in question, informs me that it is

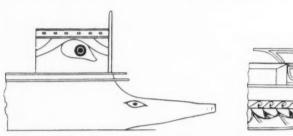


Fig. 2. Bows of Greek galleys showing a stylized boar's eye without other details of the head. In addition to this eye, the boat 'oculus' is also found above.

After Hornell.

pletely black hull (Fig. 1-B). The pair of diagonal lines in back of the oculus cannot be interpreted as an effort to mark off a triangular area. This is very probably a heavy rope around the bow of the boat for making fast the heavy forestay. This feature shows quite clearly in later Roman merchant ships. Even if these lines did mark out a triangular area, this would be irrelevant to the main discussion which is whether or not the Greeks placed oculi on patches colored differently from the central part of the hull.

g. In reference to certain statements I made regarding a first-century B.C.

25 J. Hornell, 'Survivals of the Use of Oculi

in Modern Boats,' Journal of the Royal Anthropological Institute, LIH (1923), 305.

the earliest evidence we have for the goddess Isis in South Arabia.

4. In an effort to strengthen an argument that an oculus close to a boat on rock drawings, paintings, or other representations is evidence for use of this design on a boat, Professor Quigley states that in a lineal rock drawing it would not be possible to depict the oculus on the hull itself.²⁷ The reasoning for this is certainly not evident since some of the rock drawings of boats are very large. It is not unusual for those of Predynastic Egypt to be four to eight feet long. At any rate the statement is not correct, for at least one of the Scandinavian rock drawings shows what has been inter-

²⁶ C. Quigley, op. cit., p. 30, n. 20.

²⁷ Ibid., p. 41.

preted as an oculus, as Professor Quigley pointed out some fourteen pages before.28

5. Professor Quigley says that I was very emphatic that none of the Mesopotamian people used the boat oculus.²⁹ This is indeed a fact. Then he states that he does not find the boat oculus until the third millennium B.C. where it occurs as a plain circle on a boat incised on a piece of pottery from Susa, Iran (Fig. 3-B).³⁰ But certainly this is not sufficient evidence for suggesting that the origin of the boat oculus goes back to the proto-

the case with these incised sherds in question, for the one from Susa is some three hundred years later than similar Mesopotamian forms (Fig. 3-A), according to Professor Quigley.

This circle at the end of a boat is the only occurrence in the Mesopotamian area for what might be interpreted as a boat oculus. Nothing is found earlier, and it is never seen again. There seems to be a more logical explanation for this plain circle. We have a number of pottery boat models, some as early as the Ubaid period, and many of these show

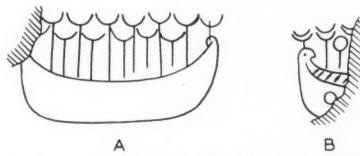


Fig. 3. Designs representing boats incised on pottery from Mesopotamia. (A) and from Susa, Iran (B). The vertical 'standards' may represent stylized plants. The circle on the bow of the Susa boat could be an oculus, or it could represent the hole placed in the bows of many Mesopotamian pottery boat models.

Drawn from halftones published by Heuzey.

Elamites. Actually Frankfort has shown that the designs of some of the earliest glyptic of Susa (the cylinder seals of the Uruk or Early Protoliterate period) probably spread there from the central Mesopotamian plains area, while Perkins has shown that later (in the Early Dynastic period) much of the pottery, stone vessels, and cylinder seals of Susa were based on Mesopotamian prototypes. Early Such would also appear to be

a rather large hole through one end.³³ Whether these holes were intended for hanging the model up, for passing some transverse member through, for making a rope fast (towing or mooring), or for some other reason we do not know. At any rate, they provide a more reasonable explanation for the plain circle on the Susa boat.

6. Professor Quigley says that the boats just discussed in the last item are

Macmillan and Co., 1939), pp. 25-26; A. Perkins, 'Relative Chronology of Mesopotamia,' in R. W. Ehrich, Relative Chronologies in Old World Archaeology (Chicago, 1954), p. 48.

33 A. Salonen, 'Die Wasserfahrzeuge in Babylonien,' Studia Orientalia, VIII (1939), pls. XI-3. XIII-3. Salonen says these holes represent holes for mooring lines (p. 117).

²⁸ Ibid., p. 27, n. 10.

²⁹ Ibid., p. 43.

³⁰ L. Heuzey, 'De la décoration des vases chaldéens,' Revue d'Assyrologie et d'Archéologie Oriental, VI (1907), pl. III: 1, 3.

³¹ C. Quigley, op. cit., p. 46.

³² H. Frankfort, Cylinder Seals (London:

filled with 'vertical standards surmounted by lunar crescents and in one case (in the earlier boat which lacked the oculus), by a solar disk.' ³⁴ Actually, this 'solar disk' is associated with the boat with the circle 'oculus' (Fig. 3). Further, there is no evidence for specifically associating these circles and crescents with the sun and moon. In Egyptian hieroglyphs crescent-shaped objects represent birds' nests, boats, and the moon (upside-down crescent). ³⁵ In the earliest Mesopotamian pictograms we have for the sun, it is shown as crescent-shaped. ³⁶ In many of the early Mesopotamian pictograms we have for the sun, it is shown as crescent-shaped. ³⁶ In many of the early Mesopo-

filled with crescent standards.^{as} He points out that in some of the vases (not published) the 'standards' extend past each end of the boat. There is another explanation for these 'standards.' Frankfort says that if these representations were Egyptian they would indicate papyrus swamps. Of course the papyrus was not known in Mesopotamia. However, I see no reason why these could not be stylized swamp plants shown behind the boats to indicate the environment. We do have early evidence which indicates that plant stems were shown behind animals for such a purpose. In a

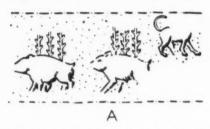




Fig. 4. A, Late Uruk cylinder seal showing boars with groups of plants behind them to perhaps indicate a swamp.
After Frankfort, Cylinder Seals.

B. Akkadian cylinder seal showing a boat with a group of similar plants behind it to probably indicate that it too was in a swamp.

After Ward, Seal Cylinders of Western Asia.

tamian cylinder seals some of the objects normally identified as the crescent moon in the sky are actually boats, as can be seen by the lines across them to represent the lashings of reed boats. Thus one should not be dogmatic in associating every crescent-shaped object with the moon and every circular object with the sun.

Frankfort has considered the problem of these particular boats apparently cylinder seal from the Late Uruk (Early Protoliterate) period groups of plant stems are shown behind boars, which in later representations were normally shown in swamps (Fig. 4-A).²⁰ In another seal from the Akkadian period we see a similar clump of plants behind (or 'in') a boat to indicate perhaps that it was in a swamp (Fig. 4-B).⁴⁰ Thus Quigley's 'lunar crescents' may well be stylized plants.

34 C. Quigley, op. cit., p. 43, n. 63.

²⁵ A. Gardiner, Egyptian Grammar (2nd ed., London: Oxford University Press, 1950), pp. 468 (No. G 7), 473 (No. G 48), 486 (No. N 12).

36 A. Falkenstein, Archaische Texte aus Uruk (Berlin, 1936), Sign No. 194.

³⁷ H. Frankfort, op. cit., pls. XV-k, XXI-b.

38 H. Frankfort, Studies in Early Pottery of the Near East (London: Royal Anthropological Institute, 1924), I. 138-139.
39 H. Frankfort, Cylinder Seels (London: Mac-

millan and Co., 1939), pl. IV-b.

40 W. H. Ward, Seal Cylinders of Western Asia (Washington: Carnegie Institution, 1910), p. 126 (No. 361).

7. Professor Quigley points out that I stated that 'none of the representations we have of Phoenician craft show oculi at both ends,' and he introduces evidence which he maintains disproves this statement.11 He follows Dunand in this statement, which is based on a pottery model.42 However, Dunand is mistaken in identifying protuberances on each side of the bow and stern as 'magical eyes.' Between the protuberances at each end are two in the center, and these are obviously the projecting ends of the beams which clearly show in the photograph inside of the model. The protuberances at each end are at the same level as short fore-and-aft decks, and thus it is very reasonable to suppose that they are also the projecting ends of beams. Projecting beam ends at deck level was a characteristic of ancient Egyptian and later Mediterranean shipbuilding which lasted into medieval times. Certainly the end protuberances cannot be separated from similar protuberances in the center associated with crossbeams. Therefore the first occurrence of the stern oculus in the Mediterranean is still the Roman example I cited.

8. Professor Quigley states that in Egypt the triangle-and-rod (ax) symbol came in from the East and became the symbol and hieroglyph for 'deity.' ⁴³ There is no evidence for such a statement. Actually, to the contrary, Petrie showed that the earliest forms of this hieroglyph from the First Dynasty consistently show two (or three) small unconnected diagonal strokes at the top of a vertical line, and he points out that in view of this the later hieroglyph cannot be derived from an ax as has been suggested.⁴⁴

g. Professor Quigley states that 'The earliest known sail is found at Eridu in

Mesopotamia in the late Ubaid period." if This statement is made on the basis of a pottery model with a socket in the bottom and is objectionable on several accounts. In the first place, the excavators compared this model with the earliest known datable representation of a sail which is painted on a vase of the so-called 'simplified' Decorated ware from the very last of the Gerzean period of Egypt, i.e., just before the First Dynasty, 46 Actually there is earlier evidence from Egypt for the presence of the sail. This is also a pottery model: there are three holes inside it towards one end. which Petrie reasoned were for a tripod mast. Fetrie compared this with a boat on a pottery box from the Amratian period. Since Frankfort would synchronize the Ubaid period and part of the earlier Halaf period with the Amratian period, " Mesopotamia clearly has no priority on the invention of the sail, even if the Eridu model represents a sailboat. Therefore the sail did not necessarily spread to Egypt from Mesopotamia as Professor Ouigley suggests. 49

There is another fact to consider. The earliest representations we have of sailling ships from Egypt (from prehistoric times through the Old Kingdom) show the mast set up considerably forward of the center of the boat. This is true of sails found on primitive reed boats to-day, such as those of Peru. It is also true of a modern reed canoe of the Persian Gulf.⁵⁰ The fact that the socket (for a single round member) is forward of the center of the Eridu model indicates that it could have been intended for a mast. But the socket could also have held a

45 C. Quigley, op. cit., p. 54.

⁴⁶ S. Lloyd and F.

⁴⁶ S. Lloyd and F. Safar, 'Eridu, 1947-8,' Sumer, IV (1948), 115-125, pl. V.

⁴⁷ W. M. F. Petrie, *Prehistoric Egypt* (London: British School of Archaeology in Egypt, 1920), pl. VII-17, p. 8.

⁴⁸ H. Frankfort, *The Birth of Civilization in the Near East* (Bloomington: Indiana University Press, 1951), p. 112.

⁴⁹ C. Quigley, op. cit.

⁵⁰ R. L. Bowen, Jr., 'Primitive Watercraft of Arabia,' American Neptune, XII (1952), 195.

⁴¹ C. Quigley, op. cit., p. 44, n. 66.

¹² M. Dunand, Fouilles de Byblos (Paris: Paul Geuthner, 1937 & 1939), Text, pp. 223-225.

¹³ C. Quigley, op. cit., p. 49, n. 83.

⁴⁴ W. M. F. Petrie, Royal Tombs of the First Dynasty (London: Egyptian Exploration Society, 1900), 1, 30.

religious standard of some nature, or hind this statement certainly is not evieven a figurine. A representation of a sail does not occur in Mesopotamia until Assyrian times (about the seventh century B.C.), although Sumerian and Akkadian texts provide the first definite evidence that a sail was used before 2000

10. Professor Quigley states that 'About the same time [end of the fourth millennium B.C.], the sail came into Palestine, possibly from the south.' 51 Actually there is no ancient evidence at all for the sail in Palestine. His evidence consists of a comment from a book review by Flinders Petrie on the excavations at Ghassul in Palestine: Petrie said that there was a boat in one of the frescoes. When the original colored reproduction is consulted, it is impossible to make out any boat.52 I reproduce here this alleged boat, which is found between the two rays of an eight-pointed star (Fig. 5). Petrie said that it had two sails. The excavators suggested that the object might be a musical instrument.53 If it is a boat, it is the only object in this whole fresco which is drawn upside down. Besides this, one of the red 'sails' would be without a mast. If they were sails, they must be lateen sails, and such sails do not appear in any representations until over 4,000 years later. Further, two-masted ships definitely do not occur until some 3,000 years later in Greek times. Whatever this object is, it is very certainly not a sail boat.

11. Professor Quigley relates that the spade-shaped paddle seems to have spread from Mesopotamia with the sail into Egypt, even though it is not found in Mesopotamia until the Third Early Dynastic period (about 2500 B.C. on the 'low' chronology). The reasoning be-

51 C. Quigley, op. cit., p. 54.

52 A. Mallon, R. Koeppel, R. Neuville, Teleilat Ghassul (Rome, 1934), frontispiece. This fresco is conveniently found in W. F. Albright, The Archaeology of Palestine (Middlesex: Penguin Books, 1949), p. 67, but the illustration should be turned on its right side to orient it

** A. Mallon, et al., op. cit., p. 139.

dent.51 He correctly observes that it is found in Egypt on 'the oldest paintings known, at the beginning of the Amratian Age, painted in white lines on red pottery.' Professor Quigley has not taken two facts into consideration: (1) these 'oldest paintings' show the spade-shaped

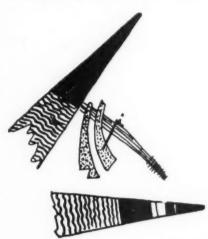


Fig. 5. Part of the large fresco from Ghassul in Palestine, showing the portion of a great eight-pointed star where Petrie detected a boat with two sails. The excavators suggested that this object was a musical instrument. Whatever the object is, it is certainly not a boat. The length of the 'boat' is about 15

Drawn from the original plate of Mallon, et al., Teleilat Ghassul.

paddle associated with the curved indigenous Nile boats of ancient Egypt (as opposed to the high-ended boats of Mesopotamian type); (2) the earliest representations we have of Mesopotamian boats, from the Late Uruk period, show that these boats were propelled by a punting pole, and steered with a steering oar.55 Punting poles are also used

51 C. Quigley, op. cit., p. 54.

85 H. Frankfort, Cylinder Seals (London: Macmillan and Co., 1939), pl. III: d, c.

by the present-day Marsh Arabs of southern Mesopotamia. Therefore, we seem to have evidence here of a trait which may well have spread from Egypt to Mesopotamia. Gertainly the fact that spade-shaped paddles occur in Egypt over a thousand years before we see them in Mesopotamia cannot be ignored.

12. Professor Quigley states that 'it is very likely that sawn planks, although available, were not used until iron nails made it possible to eliminate cleats and sewing,' sometime after 1000 B.C. ⁵⁶ But Salonen's comprehensive treatise on Mesopotamian shipbuilding deduced from the texts of about 2100 B.C. shows that we undoubtedly have evidence of planks and wooden peg fastenings for holding them to ribs. So the idea of sawn planks 'nailed' onto ribs with trenails goes back well into the Bronze Age, and did not have to wait for Iron Age nails.

13. Professor Quigley points out that there are only two boats known from the Indus civilization, and says that the excavator Mackay discerned in these two boats (one from a seal and one a graffito from a potsherd) 'such features as the sail, bipod mast, high stern, sewn hull, rectangular cabin, starboard steering, and vertical standards, one of which carries the "harpoon sign".' 58 Mackay made no mention of the sail, sewn hulls, or the harpoon sign. Mackay actually pointed out that the curved boat of the seal was lashed together at bow and stern suggesting that it was made of reeds like similar primitive craft of southern Baby-Ionia, certainly not of wood. No sail is shown, only what might be interpreted as a yard and boom high on a mast.

14. Professor Quigley states that 'In the south the Semites [South Arabians], as we have seen, obtained the oculus with Egyptian features which could only have existed together in the third millennium B.C.' ³⁰ He is suggesting that the

oculus was spread to South Arabia by Egyptian ships which were travelling to Punt at this time. The only difficulty with such a suggestion is the fact that the evidence now at hand indicates that before the second millennium B.C. South Arabia was inhabited by only primitive lood-gatherers.

I have actually produced the earliest evidence of civilized habitation in ancient South Arabia, and this probably does not go back past the middle of the second millennium B.C. The existence of people in South Arabia capable of building wooden boats on which oculi could be placed in the third millennium B.C. is a matter of extreme conjecture. I have asked Professor W. F. Albright for a short statement concerning the inhabitants of South Arabia before the second millennium B.C., which follows:

I consider it as substantially certain that the original speakers of the languages of the inscriptions from South Arabia came from farther north, presumably from Nejd and Hejaz, since the grammar and vocabulary, as well as the proper names, found in the inscriptions are very close to those of Syria-Palestine in the second millennium. The ancestors of the Ethiopian peoples (linguistically considered) and Shkhauri, and Botakhari, etc., tribes, speak a grammatically older form of Semitic (or of Semitic), though they have considerably influenced each other in vocabulary. My guess is that the forebears of these peoples had been in South Arabia for a long time—possibly for thousands of years-and that they were pushed into Africa and south of the Empty Quarter by the newcomers in the second millennium B.C. Huzavvin and Miss Caton Thompson both discovered flint artifacts in Hadhramaut, though they are very hard to date. The inhabitants of South Arabia before the second millennium B.C. must have been very primitive food-gatherers.

I have read Professor Quigley's comment which is to follow this note. He spends about half of his space still arguing the Greeks and the Romans, which is unfortunate, for he has obviously refused to accept my restatement of the case in my second article. Of the 14 in-

⁶⁰ R. L. Bowen, Jr., and F. P. Albright, Archaeological Discoveries in South Avabia (Baltimore: Johns Hopkins Press, 1958).

⁵⁶ C. Quigley, op. cit., p. 56, n. 97.

⁵⁷ A. Salonen, op. cit., pp. 83-101.

⁶⁸ C. Quigley, op. cit., p. 56, n. 100.

⁵⁹ Ibid., p. 57; cf. also p. 42.

stances I list directly above where he either had failed to interpret the ancient evidence correctly or had made factual misstatements, he has chosen to argue only four of these (my items 3, 5, 6 and 14 above). Unfortunately there are still many errors of both fact and judgment in these sections to follow. I will handle these very briefly in the order they occur, continuing the numbering started above.

15. In item 5 above I suggested that the circle shown on a boat design (Fig. g-B) was not an oculus, but perhaps could be identified with the holes found on numerous early pottery models from the same general area. Professor Quigley says that we have solid proof that the circle is an oculus because 'on the same fragment of pottery immediately before the bow of the boat are two triangles with an oculus on one of them.' Actually these additional designs are not 'immediately before the bow,' but are in the register to the left and are separated by the borders of the two registers and by a space between the two borders. His reasoning that the plain circle in the triangle here is an oculus presumably stems from the fact that in certain instances in the earlier periods recognizable eyes are found enclosed in triangles. However, in the case at hand the circle is not in a triangle; two sides of this 'triangle' extend towards the right border of the register enclosing these elements, and these legs enclose the other triangle. The circle and the other triangle obviously form part of a larger design whose true nature is not apparent since only a small portion is preserved. Therefore there is no 'solid proof' that this circle, or the circle on the boat end (Fig. g-B), are eyes.

16. Professor Quigley further states that my comparison of the circle (Fig. 3-B) with the holes seen on the models shown by Salonen is based on 'grave distortion.' He says that Salonen's punctures are on the upcurving stem above the level of the gunwale. This may be true of one model which Salonen shows, but not of the two to which I give ref-

erence above. These latter two show holes similar in size, shape, and position to that of the boat design in question (Fig. 3-B).

17. In his note 1 in relation to item 6 above Professor Quigley states that 1 hold in general that 'there is no evidence for associating disks or circles with the sun or crescents with the moon.' Obviously my passage in item 6 containing this statement refers to the boats of Fig. 3. This is typical of the way in which Quigley insists in distorting what 1 have written, and on misusing other

authorities.

18. In a further discussion of item 6 above Professor Quigley says in his note 11 that the vertical objects behind the boars of Fig. 4-A are obviously vegetal because 'the branches are placed alternately on the stem . . . as well-behaved branches should.' However, he maintains that in Fig. 4-B the 'horizontal projections [over the boat] extend at right angles from the upright and are directly opposite in pairs because each pair is the base of an inverted triangle with apex downward along the standard.' He is saying in essence that these 'branches' are standards composed of triangles with apexes down. But this does not explain the third element projecting at the top in true plant style (Fig. 4-18). Nor does it explain hundreds of similar designs of obvious plant nature. He further says that a similar standard, 'with four such triangles,' is shown on an Amratian pot in Raphael.61 In this case he is clearly wrong, since this Egyptian boat is the obvious ancestor of the hundreds of 'ships' painted on the Decorated ware of the Gerzean period which follows. It is universally accepted by most scholars writing on Egypt that these bow ornaments were 'branches' placed at the bows of the boats, and Petrie even went so far as to suggest that they provided shade for a lookout.62 Many of these bow

61 M. Raphael, Prehistoric Pottery and Civilization in Egypt (Washington, 1947), pl. XVII-1.
 62 W. M. F. Petrie, Prehistoric Egypt (London, 1920), p. 18.

branches, some highly conventionalized, are shown in the reference which Professor Quigley gives for the earliest boat standards in Egypt.63 It is not clear whether or not he has confused these bow branches with the true Egyptian standards, which are invariably near the cabins shown on these boats. If Professor Quigley would claim that the branches on these boats represent standards composed of inverted triangles, he stands alone. There is abundant evidence from Egypt, both in Badarian64 and Amratian times,65 for plant designs consisting of stems with leaves branching off directly opposite each other. All who have previously considered these designs feel that they are vegetal.

19. In relation to these plant designs, which Professor Quigley considers to be standards composed of inverted triangles, he says that 'Baumgartel calls this symbol "triangles . . . arranged in rows so that the apex of one touches the center of the base of the next." ' In the first place, Baumgartel certainly did not consider this design a 'symbol,' but rather said that it was a 'curious pattern.' 68 These motifs were used as decorative patterns on the outside of pots in both Egypt and Asia, and there is no reason to consider that they had any symbolic value when used as such a decoration. Finally, this inverted triangle design is definitely not the same as the branch design with which Professor Ouigley would compare it, since the latter has no bases on the alleged triangles.

show that the boat oculus could not have spread from Egypt to South Arabia in the third millennium B.C. because at that time there were undoubtedly only M. Raphael, op. cit., pls. XXIX-XXXII.

20. In item 14 above I attempt to

primitive food gatherers in the area who probably did not possess wooden boats. Professor Quigley takes my statement that these primitives were probably pushed into Africa by invaders, and says that 'No one could be pushed from South Arabia to Africa except in boats.' Now this is a rather naïve statement even for Professor Quigley. A boat is the most highly developed form of watercraft. The primitives of South Arabia could have known rafts of a variety of forms. In fact I have previously published two rafts, presumably belonging to the people of Punt (either South Arabia or East Africa), which were drawn in an Egyptian tomb about 1500 B.C.67 In Roman times certain people in these areas were still using primitive rafts and floats. The Periplus (written about A.D. 50) tells us that the South Arabians and the East Africans of the Gulf of Aden were using rafts, while Pliny said that rafts were used on the Ethiopian coast. 68 There is no evidence that oculi were ever placed on rafts.

RICHARD LE BARON BOWEN, JR.

THE ORIGIN AND DIFFUSION OF OCULI

The brief time allowed me to compose this rebuttal makes it necessary that I concentrate on the essential element of the controversy with a minimum of scholarly references.¹ That essential is:

67 R. L. Bowen, Jr., Boats of the Indus Civilization, Mariner's Mirror, 42 (1956), 279-290.

⁶⁸ R. L. Bowen, Jr., 'Primitive Watercraft of Arabia.' American Neptune, XII (1952), 186-221, espec. 190-191.

¹I see little need for scholarly references in view of the amount of these offered in my January 1958 article. Moreover Mr. Bowen made little use of the references I gave, continually demanding evidence for statements of mine which were fully documented. For example, my statement about the triangle-and-rod as a deity symbol in Egypt was in a lootnote and followed by two references, yet Mr. Bowen says 'there is no evidence' (point 8 on p. 241). In his point 6 on p. 240 he similarly says that there is 'no evidence' for associating disks or circles with the sun and crescents with the moon, after I had given such voluminous references to these points and others that Mr. Dodge asked me to

⁶⁸ M. Raphael, op. cit., pis. XXIX-XXXII. Raphael is not to be considered an authority on Egyptian culture. I use the reference only because it is Quigley's source for these designs.

⁶⁴ Ibid., pl. VII: 1-5.

⁶⁵ Ibid., pls. XVI: 2, 8; XIX: 12-14, 17-19; XX: 1, 2, 4; XXIII: 1-4.

⁶⁶ E. J. Baumgartel, The Cultures of Prehistoric Egypt (2nd ed., London: Cumberlege, 1955), p. 56.

who could have taken oculi to India? Unfortunately in his current rejoinder Mr. Bowen still argues (1) that I should have had no difficulty in understanding' what 'Roman origin' meant in connection with oculi and that all my 'arguments on this subject make no sense' and (2) that when he said 'Romans' he did not imply Latin speakers but some-

body else.

To support his first argument Mr. Bowen now reprints the six cases in which the expression 'Roman origin' appears. His explanations of at least half of the six remain unconvincing. In reference to the first case (p. 20) Mr. Bowen now argues that the expression 'Roman origin' applied to 'bow patches,' not to oculi, since oculi were not mentioned in the whole paragraph. Quite true, but irrelevant, since the paragraph in question is sandwiched between two paragraphs concerned with oculi, and the patches were inserted there only as evidence that the oculus in India has a 'Roman origin.' So 'origin' refers to oculi and not to patches after all.

A similar situation exists in respect to the fifth use of 'Roman origin' (p. 24). In this case Mr. Bowen is arguing against Hornell's statement that Sicilian oculi came from the Greeks, on the grounds that the Greeks did not use triangles on their boats and, accordingly, 'It is this triangle which shows the common Roman origin of all such designs. This design has been spread from England to China by the Roman Empire.' Here we have three possibilities: (1) If the word 'design' in the last two sentences means the use of oculi (at I took it to mean) both statements are untrue, as I have been trying to show. (2) If the word 'design' means triangles, Hornell's state-

make substantial cuts in my documentation. Mr. Bowen rejects authorities when it suits his purpose (Dunand in point 7, Petrie in point 10, Childe in point 9, numerous writers in points 5 and 6), yet he quotes the same people a thorities when it helps his argument (Petrie ment about oculi remains unrefuted and the whole paragraph becomes pointless. (3) If the word 'design' here means the combination of oculus and triangle as Mr. Bowen now seems to imply (a) both statements are untrue, since this combination is very common both in Iran and Mesopotamia thousands of years before the Romans, (b) Hornell's statement about oculi in Sicily remains unrefuted and the paragraph becomes pointless, and (c) both statements are carefessly worded since Mr. Bowen should have said 'combination' instead of 'design' in both.

In his second use of the expression 'Roman origin' (p. 21) Mr. Bowen (cels that I should have known that he reterred only to India because the first sentence of the paragraph quotes Hornell on 'an ancient Egyptian origin of Indian oculi.' But, once again, Mr. Bowen quoted Hornell only in order to refute him and having refuted the idea of an 'Egyptian origin of Indian oculi' I do not see how that idea, after rejection, could be used to limit Mr. Bowen's statement about a 'Roman origin' to India, especially in view of Mr. Bowen's extraordinary and untrue statement that 'This design has been spread from England to China by the Roman Empire.

I have already said that Mr. Bowen's writing is frequently unclear (at least to me). As a result I had to judge what he meant by 'Roman origin' from the total impression of his article. I decided that he must mean by this 'Roman invention' because, in a context which seemed to me to refer to oculi, he spoke of 'the common Roman origin of all such designs . . . spread from England to China by the Roman Empire'; yet later (p. 45) he said 'the Chinese probably borrowed the eye from the Indians.' If these statements are mutually consistent, the second one would exclude the possibility that 'origin' in the first one could mean diffusion, so I had to interpret it

to mean 'invention.' I was driven to this by Mr. Bowen's insistence on the 'Roman origin' of the oculus in India and Sicily and the fact that I could find no evidence in his article that he knew of any oculi earlier than the Roman ones, since he sought to refute all Hornell's statements about such earlier oculi, even in Egypt. My 1955 article tried to do no more than remedy this by pointing out the occurrence of earlier oculi. Mr. Bowen may find it strange that I was willing to attribute a Roman invention of oculi to him, but I felt that anyone who believed as many untrue things as Mr. Bowen did (things which Mr. Bowen forced me to list in my 1958 article) could even believe that the Romans invented oculi.

Mr. Bowen's insistence on publishing his 1957 article, over my reiterated suggestions to the editor that the discussion be ended, made it necessary for me to write my January 1958 article. In this I sought to relute Mr. Bowen's statements either (a) that the oculus first came to India from Latin-speaking Romans or (b) that it came to India from Roman subjects in the Roman period (that is after the Roman acquisition of Egypt in 30 B.C.). Mr. Bowen now pretends that he never said that Latin-speaking Romans went to India and that my attribution of such statements to him rests on distortion, since he really meant Greeks 'in the Roman period.' But a large portion of his 1955 article was devoted to showing that Romans, not Greeks, took the oculus to India, Sicily, and 'other places in the Mediterranean' by arguing that the Romans had triangles on their boats and the Greeks did not. That excludes the Greeks (as distinguished from Romans) right there.

Mr. Bowen says that I grossly misquoted him by my statement that he spent twenty-three paragraphs trying to prove that 'Latin-speaking Romans' took the oculus to India. The printed record shows that my estimate was a moderate one. Looking at these passages once again, I see (among other things) the following eleven arguments:²

 that lack of a Roman fighting navy in the Red Sea does not indicate lack of Roman merchant ships there or any general Roman lack of concern with seafaring, because the areas were not really dangerous (a false inference from a false assumption, as I showed).

2. that Yavanas in India were not 'entirely Greek speaking' but included 'Latin-speaking Romans' (which I retured)

g, that 'at least a few true Romans visited India' because 'it is inconceivable' that Roman emperors did not send embassies to India as they did to China (this I showed was not true, by quoting the chief authorities).

6. that Roman coinage in India is evidence for Roman traders there (untrue and non sequitur).

7. that 'artemon' is a Latin word (untrue) and can be used as evidence that Romans took oculi to India (non sequitur).

8. that, while Roman warships were based on Greek models and Greek 'construction techniques,' this proves nothing about Roman merchant vessels, so we can assume that they were different (an untrue inference from an irrelevant truth).

9. that Lethbridge believed the Romans ceased to be landlubbers 'during the heyday of the Roman Empire' because he said that 'it was a race of farmers [Romans] who did more to extend the ideas of European boat-building than any other people of antiquity,' (a misinterpretation torn from a contradictory context).

10. that 'by the first and second centuries A.D. Latin-speaking Romans had learned to sail their own merchant vessels . . . substantiated by a second-cen-

 $^{^2}$ Bowen, American Neptune, XVII (1957), $_{262\cdot 272},\ _{274}.$

tury A.D. painting of a ship from Ostia which labels one man on the ship as Farnaces, captain, and another as Arascantus, presumbly the skipper.' This (an untrue inference based on a misinterpretation of evidence) was intended to refute my statement that 'Roman vessels were generally built and always manned by non-Romans.'

11. that a Hellenistic sarcophagus (originally from Syria, now in the Archaeological Museum at Venice) showing Greeks fighting from warships about 200 B.C. is a 'Roman relief' (misuse of the

word 'Roman.'

These eleven arguments extend from the third to the thirty-third paragraph in Mr. Bowen's article. Mingled with these arguments are other paragraphs seeking to refute theories attributed to me, but I think it is fair to say that twenty-three of the thirty-one paragraphs are seeking to show that Latinspeaking Romans were an important seafaring people likely to sail ships to India. To be sure, scattered among these paragraphs are a half-dozen sentences conceding that other Mediterranean peoples such as Greeks or Egyptians also went to India, or owned ships which went there. In his present article Mr. Bowen has gathered together these halfdozen sentences (on p. 236) in an effort to show that throughout these thirty-one paragraphs he was arguing that 'Greekspeaking Roman subjects from Egypt' not 'Latin-speaking Romans' were sailing to India. If this had been his purpose in these paragraphs there would have been no need to talk about non-Greek Yavanas, Roman embassies, the Arikamedu Roman 'trading station,' finds of Roman coins, the Latinity of the word 'artemon,' the distinctions between fighting navy and merchant fleet, the misrepresentation of the consensus of authorities on Romans in India, Lethbridge's 'race of farmers' or the picture at Ostia with Latin labels.

After seeking in this fashion to reverse the whole argument of his 1957 article in order to make it say the opposite of what it did say, Mr. Bowen now goes on to claim that my own theory about the diffusion of oculi to India is exactly what he had been trying to prove: 'namely that Western ships were sailed to India by Alexandrian merchants.' ³

This not only is not what Mr. Bowen was trying to prove; it equally is not what I said. In my January 1958 article I mentioned five peoples who could have taken the boat oculus to India before the 'Roman period' (31 B.c.). These were: (1) Egyptians, 2500-1150 B.C.; (2) Mcsopotamians, in the third millennium. down to about 1500 B.C.; (3) Levantines (Phoenician-Hebrews) after 950 B.C.; (4) Hellenistic Greeks after 926 B.C.; and (5) various Semite peoples in the late centuries B.C. All of these, I contend. were familiar with the boat oculus and sailed to the Arabian Sea in the periods mentioned. Mr. Bowen prefers, however, to believe that the oculus came to India at a much later period (first or second centuries A.D.) at the hands of Roman subjects. To strengthen this claim, for which direct evidence is lacking, he makes certain criticisms of the first three peoples on my list but does very little with the last two.4 He does, however, not deny that all five went to the Arabian Sea and he does not deny that four of these earlier scafarers had the boat oculus. He does deny this of the Mesopotamians. I produced a third millennium B.C. boat oculus from the Persian Gulf drainage area, but Mr. Bowen insists that it is not an oculus. He feels this design must be something else, perhaps a hole for passing some transverse mem-

3 Bowen, ante, p. 236.

⁴ We have documented proof that Greeks under Nearchus built ships in India as early as 326 K.c., yet Mr. Bowen ignores this possible diffusion of the oculus to India in favor of 'Roman' visits which are supported by no evidence and rejected by the authorities on the subject. Four or five centuries later, when most of the authorities agree that Arabs 'were prominent' in the maritime trade to India. Mr. Bowen insists on the importance of 'Roman subjects,' but has hardly a word for the Arabs. See my analysis of the authorities, AMERICAN NEFTUNE, XVIII 11958), 36-39.

ber through, for making a rope fast (towing or mooring), or for some other reason.' But we have solid proof that the circle on the boat is an oculus: on the same fragment of pottery immediately before the bow of the boat are two triangles with an oculus on one of them.5 The circle on the triangle is clearly an oculus; by no fantastic reasoning could it be argued that it is a hole for a traverse member, or for fastening a rope, or for hanging something up. Since the circle on the boat is the same as the circle on the triangle and they both are on the same sherd, they clearly stand for the same thing: an oculus. I have already given evidence that oculi on triangles are common both in Mesopotamia and in India, being more common in the earlier period, and that they are common in Iran even earlier than in the other two areas (fifth millennium B.C.).6 Mr. Bowen's efforts to interpret these symbols (usually called 'eyes' when they are not on boats) as something other than eyes when they appear on boats leads him into fantasy. He wishes to give a naturalistic interpretation of these marks, but surely no real boat would have a hole as far down on the hull as this circle is (about halfway between gunwale and keel, near the water line). Moreover Mr. Bowen's efforts to show that this circle on a pottery design represents a hole such as is sometimes found in model boats made of clay and his reference to Armas Salonen to this effect is based on grave distortion: there is no similarity in size, shape, or position between the circle on the pottery and the perforations on Salonen's model boats. The latter are punctures on the upcurving stem above the level of the gunwale. Salonen says himself, in the passage to which Mr. Bowen refers, that the holes on the models are in the stem ('im Steven'). Thus Salonen's examples of clay models have nothing to do with the oculus on pottery which I am discussing.

The real difficulty here is one against which I warned in my January article: these designs must not be regarded as naturalistic representations of contemporary boats, but as symbols. Accordingly, the other symbols surrounding them must not be ignored, as Mr. Bowen does and as other students of early watercraft (like Moll) frequently do. Certainly, if naturalistic interpretation is to be used, we should not interpret a circular mark near the water line as a hole.

The tendency to apply naturalistic meanings to representations of ancient watercraft by tearing such representations away from their physical and historical contexts also appears in Mr. Bowen's remarks about the lunar and solar standards which fill the boats in Fig. 3. It is universally recognized by authorities on the ancient Near East that the numerous deities there were represented by standards and that these standards appear, singly or in groups, in many pictures of early watercraft. In the first chapter of her book Symbols of the Gods in Mesopotamian Art, Mrs. Elizabeth Douglas Van Buren uses the word 'standard' fifteen times in the first seven pages. In his splendid volume, Kingship

7 As evidence of the symbolic nature of many ancient boats we might mention that Sir Leonard Woolley found substantial quantities of very small model boats deep down in the drains from houses at Ur. He believed these had been dropped in the drains by the residents to carry messages to the subterranean deities. In Sir Leonard Woolley, Excavations at Ur. A Record of Twelve Years' Work (Crowell, New York, 1954), pp. 108-109.

⁵ Mr. Bowen in Fig. 3-B shows only the boat and omits the two triangles so important in interpreting the symbol on the boat. The reference he gives in his n. 30 shows the whole sherd. I mentioned the importance of the whole sherd in Quigley, AMERICAN NEPTUNE, XVIII (1958), n. 56 and n. 63.

⁶ Quigley, op. cit., p. 41, n. 56 and p. 43, n. 64. On their general distribution and greater frequency in the earlier period see M. E. L. Mallowan, 'Excavations at Brak and Chagar Bazar,' Iraq, IX (1947), 1-266 at 205-210. For the importance of the distinction between 'eye-symbols' and 'eyes-symbols' see my review of O. G. S. Crawford, 'The Eye Goddess' (New York: Macmillan, 1957), in American Anthropologist, IX (1958).

and the Gods-A study of Ancient Near Eastern Religion as the Integration of Society and Nature, Henri Frankfort mentions standards frequently, including a three-page discussion (pp. 91-93) in which he says, 'These are obviously symbols of the gods, . . . [They] partake of the power which they represent. They are true fetishes, replete with power." Mrs. Van Buren agrees, pointing out (p. 2) that the name of a symbol 'was sometimes preceded by the divine determinative, testifying that the symbol itself was deified.' The use of standards bearing emblems as divine symbols was general in the ancient Near East.

The earliest representations we have of ancient watercraft contains such standards, both in Egypt and in Mesopotamia.* In most cases there is only one standard in a boat, but more than one, in some cases so many as almost to fill the vessel, are by no means uncommon. They are usually lunar crescents symbolizing deities and are so recognized by the authorities, including Van Buren, Legrain, Heuzey, and others. Van Buren quotes Legrain (p. 65) as follows: on a fragment of incised black pottery, a boat carrying thirteen standards of crescents on posts probably represents the year.

Mr. Bowen would like to counter-

8 Max Raphael, Prehistoric Pottery and Civilization in Egypt (Bollingen Series VIII, Pantheon Books, Washington, D. C., 1947), pls. XI, XVII, XXVIII-XXXII; H. Frankfort, Cylinder Seals (London: Macmillan, 1939), pl. III d-e (Uruk).

PG. Cros and L. Heuzey, Les Nouvelles Fouilles de Telloh (Paris, 1910), pp. 38, 39, 127, 136, 138, 144, 147, 148, 150, 236, 244; University of Pennsylvania Museum, Publications of the Babylonian Section, XIV, 65. Unpublished examples from Umma are in the Louvre. Mrs. Van Buren (op. cit., p. 16) mentions another, about 1200 B.C., where 'a sacred ship supports symbols of the gods, including a morru set on a tall shaft'; a marru is a triangle with apex upward, 'representing an obtusely triangular spade,' an archaic agricultural tool used as a symbol of Marduk. The ship is shown in J. de Morgan, ed., Memoires de la Mission de la Délegation en Perse (Paris: E. Lerroux, 1900-1912), IV, pl. 17, or M. Pézard, Catalogue des Antiquités de la Susiane (2nd ed. Paris: Musées Nationaux, 1926), p. 46 and pl. VI.

balance this authoritive consensus by implying that Frankfort believed they were swamp plants; but Frankfort believed no such thing; in fact, he clearly says, 'this explanation is obviously impossible.' 10 He then goes on to explain that the crescent standards are 'conventionalized' survivals of the four crescents or crutches he sees on the ship of the Gebel el Arak knife handle. According to Frankfort, three of the crescents on the more ancient vessel were functional. while the fourth was a 'crescent-ensign' like those in the Telloh boat. He believes that the many standards in the latter arose from the conventionalization and multiplication of the four crescents on poles of the ship from Egypt. There is nothing whatever to indicate that these were water plants.11 I differ from Frank-

10 Mr. Bowen mistakenly believes that Frankfort applied the word 'impossible' only to the explanation that these standards were papyrus; Frankfort meant that it was impossible that they were any kind of plants, as is obvious from his explanation that they were derived, not from swamp plants, but from functional parts of the Mr. Bowen also tries to interpret the statement that these standards, in some cases, extend beyond the ends of the boat, as indicating that they must be water plants, but Frankfort had no such intention and mentions these as 'clear indications that our examples do not contain true representations, but pictures in which the exact meaning of the details was lost long ago . . . our designs are conventionalized. Frankfort is simply indicating that these are not pictures but symbols and as symbols do not have to be on the boat but merely near it, as I have said several times. Since I know Mr. Bowen does not accept this I have been prevented from offering, as examples of boat oculi in Mesopotamia, the many cases where the oculus is near the boat but not on the hull.

12 The certainty that the objects in the boats of Fig. 3 are lunar standards is so well established that it hardly seems necessary to discuss Mr. Bowen's efforts to find similarity between the vertical objects behind wild boars in Fig. 4-A and the objects in the boat of Fig. 4-B. In the former the branches are placed alternately on the stem and extend from it at acute angles as well-behaved branches should. In 4-B the horizontal projections extend at right angles from the upright and are directly opposite in pairs because each pair is the base of an inverted triangle with apex downward along the standard. A similar standard, with four such triangles, on a ship is shown on an Amratian pot in

fort only in that I would explain the many standards in the Telloh and Susa boats as arising simply from multiplication of the single crescent standard which Frankfort recognized on the Gebel el Arak ship. Such multiplication of divine symbols to increase religious efficacy is common among all peoples, while I can see little reason to multiply functional features, as Frankfort would explain it in this youthful work (written when he was twenty-five years old, and displaying, as he later admitted, 'the unfortunate combination of excess of conviction with lack of experience').

Thus the use of oculi with ships (although usually not on the hull) and the symbolic nature of standards in boats seems to be well established in the Mesopotamian area. If this is true, it is clear that all five of the peoples I listed as scafarers on the Arabian Sea before 30 B.C. had the boat oculus. The only remaining difficulty seems to be Mr. Bowen's insistence that the earliest of the five, the Egyptians, could not have taken the oculus to that area, because there was

Raphael, op. cit., pl. XVII, no. 1. Baumgartel calls this symbol 'triangles . . . arranged in rows so that the apex of one touches the center of the base of the next' and gives examples from several sites in Egypt and western Asia. Van Buren calls them 'superimposed wedges' and suggests that it may be a symbol for Nahu, son of Marduk; she refers to their use as standards in a boat published by E. A. Speiser, but I am not convinced that they are the same. At any rate, this has nothing to do with the lunar standards in Mr. Bowen's Fig. 3. See Baumgartel, op. cit., p. 56; Van Buren, op. cit, pp. 183-184.

12 Since Mr. Bowen concedes that the Phoenicians had the boat oculus, there is no need to discuss his rejection of M. Dunand's statement that the Byblos boat shows oculi at both ends. If the point is relevant to the question of who took the oculus to India, M. Dunand's authority on this particular boat seems at least as authorative as Mr. Bowen's. I might mention, at this point. Contenau's theory that the so-called Roman ship' is really a Phoenician vessel and that these same people invented the artemon sail. G. Contenau, La Civilisation Phenicienne (Paris: Payot, revised, 1939), p. 296, or G. Contenau, 'Un vaisseau de Tharsis sur un sarcophage sidonien,' Journal Asiatique (March 1921), pp. 168-174no one of importance in southern Arabia to receive it. The problem is, however, solely a creation of Mr. Bowen, Once again he works by implication. This time his implication is that food gatherers' would not have boats on which oculi could be put. This of course is untrue, for many nonagricultural peoples, be they gatherers, hunters, fishermen, or traders have boats, even seagoing boats. In the present case there is no doubt that the early south Arabian peoples, whether they were gatherers or not, had boats. The quotation from Professor Albright which Mr. Bowen offers as authority that these people were 'gatherers' is equally good authority that they possessed boats, for it clearly says that 'these peoples had been in South Arabia for a long time-possibly for thousands of years-and that they were pushed into Mrica . . . in the second millennium B.C. No one could be pushed from south Arabia to Africa except in boats.

There is, of course, a great deal of evidence for navigation in this area (between the Persian Gulf and Egypt around Arabia) going back before 3000 B.C. Frankfort, who apparently took it from Petrie, upheld this theory all his life and it is now widely accepted. It is supported by much evidence not usually quoted by archaeologists. For example, the fully developed cultivated

¹³ Frankfort, Studies in Early Pottery, I, 117-112. Frankfort argued this thesis for the rest of his life, although later with more skill than in this early work. See Frankfort, Birth of Civilization in the Near East (New York: Doubleday Anchor Books, 1956), pp. 121-137. Although details are still in dispute this idea is now almost orthodox. I gave references on this to Winkler, Kantor, Rathjens, Hornell, and Baumgartel (the chief work) in Quigley, 1958, n. 85, n. 86, and n. 103. See also V. G. Childe, New Light on the Most Ancient East (4th ed., London, 1952), pp. 78-79; John H. Marshall, ed., Mohenjo-Daro and the Indus Civilization (3) vols., London: A. Probsthain, 1931), II, 579-581; J. de Morgan, L'Egypte et l'Asie aux temps ante-historique,' Journal Asiatique, CCIII (1923). 117-159; B. Hrozny, 'Sur quelques rapports entre Sumer-Akkad et l'Egypt, au IVe millénaire avant J. C., Archiv Orientalni, X (1938).

cotton found at Mohenjo-Daro has no wild ancestors in India but, instead, is descended from wild plants native to south Arabia and Africa.14 According to Carl Sauer, the Arabian dromedary was known in Egypt through the First Dynasty, but no representations are found thereafter until the Hellenistic period.15 Much of the incense burned in large quantities in Egyptian temples going back to the third millennium was from southern Arabia and must have come by sea in the period before the domestication of the camel (late second millennium) made possible a land route, thus throwing the trade into the hands of the Sabaeans and ending the Egyptian navigation to Punt.16

¹⁴ Charles Singer, et al., A History of Technology (5 vols., New York: Oxford University Press, 1954-), I, 374, or, in general, J. B. Hutchinson, R. A. Silow, and G. S. Stephens, The Evolution of Gossypium (London: Oxford University Press, 1947).

¹⁵ Carl O. Sauer, Agricultural Origins and Dispersals (New York: American Geographical Society, 1952), pp. 94-95.

18 Mr. Bowen 'demands proof' for my statement that south Arabians knew of Isis centuries before the Romans. I thought it was too obvious to need proof. For at least one thousand years, and probably for two thousand, before Mr. Bowen's statue of Isis, the south Arabians were exporting frankincense to Egypt. There it was burned to the gods, being particularly associated with the worship of Isis. It was not used in

That the seaway connection between south Arabia and the Red Sea was paralleled by a similar connection between the Persian Gulf, south Arabia, and India in the same period is now beyond dispute. The Danish excavations on Bahrein Island have shown that the latter relationships were much more important than anyone believed previously. Sir Leonard Woolley now writes, ¹⁷ We shall be guilty of no anachronism if we conclude from this that from the twenty-fourth century onward Harappa business firms had their Indian agents domiciled in the cities of Mesopotamia.

Thus it seems clear that people who knew the boat oculus were navigating in the Arabian Sea during the last three thousand years of the pre-Christian era. It would indeed be strange if the use of this symbol did not reach India during this period, but had to wait for the very dubious arrival of Romans or the brief period of contact with 'Roman subjects.'

CARROLL OUIGILY

mummification. An inscription of Ramses III says that he burned 1.933,766 pieces during his 31-year reign (1198-1167). The export of incense dominated the economic life of the south Arabians; I feel sure that some of them must have asked what the Egyptians wanted it for.

¹⁷ Sir L. Woolley, 'The Urbanization of Society,' Journal of World History, IV (January 1957), 236-272 at p. 264.

BIBLIOGRAPHY

Recent Writings in Maritime History

BY ROBERT GREENHALGH ALBION

HIS is a double installment, since the bibliography was omitted from the April issue on account of the illness of the compiler.

These bibliographies are designed to include all pertinent books and articles in English, except for articles in The American Neptune itself.

Abbreviations: D&HA, Dock & Harbour Authority; MCF, Maine Coast Fisherman; PLA, PLA (Port of London Authority) Monthly; SBF, Steamboat Bill of Facts; S&S, Ships and the Sea; USNIP, United States Naval Institute Proceedings.

All dates 1958 unless otherwise indicated.

I. General

- ALLEN, JERRY, The Thunder and the Sunshine: A Biography of Joseph Conrad, 256 pp. \$4-50. New York, Putnam. Particular emphasis on his early years.
- ARMSTRONG, WARREN (W. E. Bennett, pseud.), Last Foyage, 256 pp. \$3.50. New York, John Day. Like Mielke and Rogers below, another general shipwreck book.
- BRANCH-JOHNSON, W., The English Prison Hulks, 205 pp. 18s. London, Christopher Johnson. Floating civil and military prisons, 1776-1857.
- Brows, J. A., The Terrible Voyage of the 'Marie Jeanne,' 9 pp. Reader's Digest, Feb. Harbor launch, out of food and fuel, drifts 74 days in Seychelles in 1953, with only two survivors of ten aboard.
- BURGESS, R. H., Lightship 'Tail of the Horseshoe.' Baltimore Sunday Sun Mag., 17 Nov. 1957. Career of last lightship in Chesapeake Bay.
- Chubb, T. C., If There Were No Losses: The Story of Chubb & Son From its Founding in 1882 until 1957, 93 pp. New York, Chubb & Son, History of distinguished marine insurance firm; title comes from underwriters' saving. If there were no losses, there would be no premiums.'
- Comes from underwriters' saying, 'If there were no losses, there would be no premiums.'

 DAVIDSON, L. B., & DOHERTY, E., Strange Crimes at Sea, 304 pp. 15s. London, Spearman.
- DAVIS, G. H., The Increasing Use of the Inflatable Liferaft, 2 pp. 111. London News, 4 Jan. Diagrams with brief comments.
- DOYLE, J. H., JR., USN, et al., Our Status of Forces Agreements, 10 pp. USNIP, March. Legal arrangements concerning American forces stationed in foreign countries.
- FREUCHEN, PETER, with David Loth, Peter Freuchen's Book of the Seven Seas, 512 pp. \$7.50. New York, Messner, Part 1, The Shape of the Sea; 2, Life in the Seven Seas; 3, The Sea in Action; 4. The Ships of the Seven Seas; 5. The Great Voyages; 6, Battles at Sea; 7, Treasures of the Seven Seas; 8, Islands of the Seven Seas; 9, The Law of the Seven Seas; 10, Strange Tales.
- Gibbs, J. A., Jr., Shipwrecks of the Pacific Coast, 342 pp. \$3.95. Portland, Ore., Binfords & Mort. See also XV, 311.
- They've Doused the Glim on Tillamook, 2 pp. 85'S, Summer. Closing of old lighthouse, completed in 1881, on rock off Oregon coast. See also XIV, 142; XVI, 159.

GIDDINGS, T. H., Rushing the Transatlantic News in the 1830s and 1840s, 13 pp. N. Y. Hist. Soc. Quar., Jan.

GOLDBERG, J. P., The Maritime Story: A Study in Labor-Management Relations (Wertheim Publications in Industrial Relations), 376 pp. \$6.50. Harvard. The most comprehensive account of the rise of the maritime unions and their effect upon the American merchant marine; more detailed than Hohman (XVI, 215). In addition to the full play-by-play account, see esp. Ch. 1. 'The Scaman in 1900' and Ch. 10. 'An Analytical Commentary.' A paper-bound edition was distributed to members of the NMU.

GUILL, J. H., USN, The Regimen of the Seas, 12 pp. USNIP, Dec. Question of territorial waters. HORNE, GEORGE, The 'St. Mary's' Reminds Old Scadogs of their Youth. N. Y. Times, 5 Jan., v. 11, New York Nautical School Ship, 1875-1908, formerly in USN.

— Tax Officials Bow to 'Captain's Hat.' Ibid., 16 March, v. 11. Old practice of commission to shipmasters for purchases in foreign ports upheld in case of foreign tramps et al., as legitimate deduction.

INDENBERG, H. M., Crossing the Line, 239 pp. \$5.00. N. Y. Public Library, 1957. Accounts of ceremonies during past four centuries.

MAECHLING, CHARLES, JR., Maritime Arbitration, 2 pp. Marine News, Nov. 1957.

McEwen, A. A., & Lewis, A. H., Encyclopedia of Nautical Knowledge, 640 pp. \$12.50. Cambridge, Md., Cornell Maritime Press.

MIELKE, OTTO, Disaster at Sea. 18s. London, Souvenir Press.

MOUNTJOY, A. B., The Suez Canal at Mid-Century, 13 pp. Econ. Geog., April.

PROUTY, ROLER, The Transformation of the Board of Trade, 1830-1855: A Study of Administrative Reorganization in the Heyday of Laissez Faire, 123 pp. 158. London, Heinemann, 1957. Two-thirds of the book is devoted to state control of merchant shipping.

ROGERS, STANLEY, Hazards of the Deep, 222 pp. 18s. London, Allen, 1957.

RYAN, J. J., Story of Mutiny in 1857 Revealed. N. Y. Times, 27 Jan. Killing of captain and 3rd mate on New Bedford whaler 'Junior' off Capetown, 26 Dec. 1857, being studied as precedent in barratry case involving American-owned ships in China.

WHEELER, R. A., USA, Clearing the Suez Canal, 8 pp. Military Engineer, Jan. Feb.

II. Exploration, Navigation, Cartography, Oceanography

Barbeau, C. M., Pathfinders in the North Pacific, 235 pp. \$5.00. Caldwell, Idaho, Caxton & Ryerson. Commences with arrival of the Russians.

BURSEY, JACK, USCGR, Antarctic Night; One Man's Story of 28,224 Hours at the Bottom of the World, 256 pp. \$4.95. New York, Rand McNally.

COLWELL, D. G., USNR, The Navy and Greely: The Rescue of the 1881-1884 Arctic Expedition, 10 pp. USNIP, Jan.

CRISP, W. G., North About, 4 pp. The Beaver, Spring. Schooners from Vancouver and Newfoundland meet in central Arctic in 1928.

CROIX, ROBERT DE LA, tr. from the French by Edward FitzGerald, Conquerors of the Antarctic, 268 pp. 18s. London, Muller. Cook to Byrd.

EULLER, JOHN, How Bob Bartlett lost the 'Karluk,' 6 pp. 858, Summer. Old whaler, on Canadian exploring expedition, crushed in ice near Siberia, 10 Jan. 1914.

FISHER, MARGERY & JAMES, Shackleton and the Antarctic, 559 pp. \$7.50. Boston, Houghton Mifflin. Leip, Hans, tr. from the German by H. A. Pichler et al., The River in the Sea, 222 pp. \$3.75. New York, Putnam, 1957. The Gulf Stream.

LITTLE, C. H., RCN, Voyages of Discovery—British Columbia, 5 pp. Can. Geog. Jour., April. McDonaln, E. A., USN, Weddell Sca—A Voyage to Nowhere, to pp. USNIP, Dec. 1957. Expedition to establish naval scientific station.

RITCHIE, G. S., Challenger: The Life of a Survey Ship, 249 pp. 30s. London, Hollis & Carter. Account by her captain of work of namesake of original oceanographic ship. 1931-53.

ROBERTS, S. L., Canada's Role in Arctic Navigation, 3 pp. Canadian Shipping, March. ROBINSON, A. H. W., Marine Surveying in Britain during the Seventeenth and Eighteenth Centuries,

8 pp. Geog. Journal, Dec. 1957.

Souver, C. V., & Marcus, G. J., Dead Reckoning and the Ocean Voyages of the Past. 17 pp. Mariner's Mirror, Feb. 'There exists no certain, conclusive evidence of regular ocean passages made solely by dead reckoning in the Viking age, in the era of the great geographical discoveries, or in any other era.'

STANWELL-FLETCHER, T. C., Clear Lands and Icy Seas: A Foyage to the Eastern Arctic, 264 pp. \$4.00. New York, Dodd, Mead, Voyage on Hudson's Bay Co.'s supply steamer 'Rupertsland. TREADWELL, T. K., Hydrographic Surveys in the Arctic, 7 pp. Military Engineer, March-April.

III. Merchant Sail and General Shipping—North America

BAKER, W. A., see Sect. IX.

BUNSON, F. J., The Wreck of the 'Jacob S. Winslow,' MCF, April. Timber-laden four-master lost off Black Point Rock, 1 March 1914.

BENTINCK-SMITH, JOAN, see Sect. Vla.

BURGESS, R. H., A Veteran of the Days When Sail Was King. Baltimore Sun Sunday Mag., 27 Oct. 1957. Career of Chesapeake Bay 'ram' 'Jennie D. Bell,' largest active commercial American sailing craft.

The Last of the Rams, MCF, April. Origin of the Chesapeake Bay ram.

Photos Record Last Stormy Voyage of Sailer, Newport News Daily Press, 23 March. Last

voyage of American 5-masted schooner 'Edna Hoyt' in 1937

CLARK, W. B., The John Ashmead Story, 1738-1818, 52 pp. Pa. Mag. of Hist. - Biog., Jan. John Ashmead, Philadelphia mariner, had the unique distinction of performing one hundred voyages in a long, exciting, useful life. This accomplishment was never exceeded, and perhaps never equalled, in the era of sailing ships. He was twice a prisoner in the French and Indian War, rendered distinguished service in the American Revolution, established an enviable reputation in the West Indian trade, and concluded his days as Master Warden of the Port of Philadelphia.'

DANIEL, H., Speed under Sail, 3 pp. Mariner's Mirror, Feb. Challenges Capt. Learmont's questioning (XVII, 317) of 'Record Day's Runs' over 400 miles a day by American-built clippers. Similar

comments by H. I. Chappelle, 3 pp., ibid.

FANNING, L. M., Guano Islands for Sale, 3 pp. Maryland Hist. Mag., Dec. 1957. Question of title to Navassa Island in West Indies, discovered by Capt. Peter Duncan 19 Sept. 1857.

FULLER, JOHN, Missing-The 'Wyoming,' Portland (Me.) Sunday Telegram, 26 Jan. Disappearance, with all hands, of coal-laden 3,730-ton 6-master, 'the world's largest wooden sailing vessel,' during gale off Cape Cod in March 1924.

HERRESHOFF, L. F., An Introduction to Yachting: Part I, The Antiquity of the Sport from 6000 B.C. to the Era of the Great Steam Yachts, 14 pp. Rudder, April.

KNIGHT, R. W., General John Glover: Legend and Fact. Essex Inst. Hist. Coll., Jan. Owner of Marblehead fishing vessels, rather than cobbler, after his Revolutionary military experiences.

(LYMAN, JOHN). The Intercoastal Trade before 1850, 4 pp. Log Chips, Aug. 1957.

The Intercoastal Trade, 1850-1859, 7 pp. Ibid., Nov. 1957, Feb. 1958. Includes original hard-to-find details of cargoes, freight rates, profits, and 'line service,' including many of the celebrated clippers.

Penrose, Charles, Ichabod Goodwin (1791-1882), Sea Captain, Merchant, Financier, Railroad President, Civil War Governor of New Hampshire, 36 pp. New York, etc., Newcomen Society.
ROWLAND, J. T., 'Virginia' of Sagadahoc, 2 pp. Yachting, March. 50-ton pioneer pinnace built on Kennebec in 1607: includes plans and model by C. M. Longbehn of Bath. See also Hasenfus,

XVII. 317.

SCHULL, JOSEPH, The Salt-Water Men: Canada's Deep-Sea Sailors, 114 pp. \$2.75. New York, St. Martins.

A Ship Repair Scene of Fifty-five Years Ago, Shipvard News (Newport News), April, Picture of 7masted schooner 'Thomas W. Lawson' in dry dock, 1903.

TIRRELL, R. W., The Wreck of the 'Martha & Eliza,' 7 pp. New England Hist, & Gen. Reg., July 1957-WELSH, P. C., Merchants, Millers, and Ocean Ships: The Components of an Early American Industrial Town. Delaware History, Sept. 1957. Wilmington, 1739-1815.

WHITNEY, W. T., The Crowninshields of Salem, 1800-1808, 36 pp. Essex Inst. Hist. Coll., Jan. See also Reinohl, XVI, 68.

WILLIAMS, NEVILLE, England's Tobacco Trade in the Reign of Charles I, 47 pp. Va. Mag. of Hist, & Biog., Oct. 1957. Official 1627 figures showing tobacco arriving in each ship from Virginia, Bermuda, Spanish America, etc.

IV. Merchant Sail and General Shipping—Other Regions

Albion Line Clippers, 2 pp. Sea Breezes, Jan. Pictures of four Shaw, Savill & Albion full-rigged, ships in New Zealand port.

BECKETT, W. J., Coasting in the 'Constance,' 2 pp. Sca Breezes, Feb. Experiences in British 3-masted coasting schooner, 1805-07, with details of cargoes.

BESTIC, A. A., Kicking Canvas, 255 pp. \$4.50. New York, Dutton. Recollections of first year before the mast as apprentice, on abnormally long voyage.

CAVALCANTI, CELINA, Out to Sea on Rafts, 4 pp. Americas, April. Sailing jangadas of Brazilian coast. Coombs, D., Dr. Davenant and the Debate on Franco-Dutch Trade, 10 pp. Econ. Hist. Rev., Aug. 1057.

COOPER, F. S., A Handbook of Sailing Barges, 112 pp. 12s 6d. Southampton, Coles.

DAVIES, K. G., The Royal African Company, 200 pp. \$8.00. New York, Longmans. Slave traffic to West Indies was 'one of the riskiest forms of trade in the eighteenth century,'

DAVIS, RALPH, Earnings of Capital in the English Shipping Industry, 1670-1730, 17 pp. Iour. Econ. Hist., Sept. 1957.

KERSHAW, PHILLP, The 'Pamir's' Violent End, 3 pp. Sea Breezes, Nov. 1957. Loss of German bark in hurricane, 21 Sept. 1957; also four pages of photographs. See also Ill. London News, 2 pp. 5 Oct. 1957.

The 'Pamir' Inquiry, 3 pp. Ibid., March. 'Contributing causes of the loss were the unfamiliarity of the master... with the barque, her rigging, stability, and crew.'

KROEBER, C. B., see Sect. VIIIb.

LEWIS, A. R., The Northern Seas: Shipping and Commerce in Northern Europe, AD 300-1100, 498 pp. Sq.00. Princeton, A companion work to his Naval Power and Trade in the Mediterranean, AD 500-1100 (NH, 166). The paucity of written sources has been supplemented by original research in numismatics and other fields.

(LYMAN, JOHN), Sailing Ships Launched in the United Kingdom, 1876, 11 pp. Log Chips, Aug.,

Nov. 1957: Feb. 1958.

MINCHINION, W. E., ed., see Sect. VIIIb.

The New Zealand Meat Trade: The Story of its Origins 75 Years Ago. Shipping World, 8 Jan. In Ship Stores and Catering' supplement. First retrigerated cargo in full-rigged iron 'Dunedin' of Albion Line, from Port Chalmers to London, 15 Feb.-24 May 1882 with more than 5,000 carcasses of mutton.

RAMSEY, G. D., English Overseas Trade during the Centuries of Emergence, 279 pp. 30s. London, Macmillan

Macmilla

RATHBONE, K. C., Fire and Tempest, 4 pp. Sea Breezes, Nov. 1957. Burning of East Indiaman 'Kent'

in March 1825 with loss of 80 lives.

ROHRBACH, H. C. P., et al., tr. from the German by A. G. Smith; ed. J. F. Colton, F. L. A Century and a Quarter of Rederei F. Laeisz, 243 pp. \$10.00. Flagstaff, Ariz. J. F. Colton & Co. Hamburg company, founded in 1825, 'became one of the world's largest international insurance, exportimport, and shipping houses' celebrated as owners of the 'Flying P' nitrate clippers including 'Pamir.'

SHARP, Andrew, Ancient Voyages in the Pacific (Pelican Book A404). 240 pp., paper. 85 cents. Baltimore, Penguin Books.

Teiens, Alfred, tr. from the German by F. M. Spochr, Among the Savages of the South Seas: Memoirs of Micronesia, 1862-1868, 143 pp. \$3.75. Stanford.

WILLIAMS, NEVILLE, see Sect. III.

V. Fisheries and Whaling

PAYTICH, S. A., Interamerican Law of Fisheries: an Introduction with Documents (Univ. of Miami, School of Law, Interamerican Law Program), 117 pp. \$3,75. New York, Oceania Pubs.

COLE, GRAY, 'Wonder I' Sails out of the Past, 1 p. Motor Boating, Feb. Ilchen Ferry punt, a single-masted fishing boat from near Southampton.

DIETZ, LEWIS, Forty Fathom Fisheries, 3 pp. MCF, Feb. Pictures, with brief comments, on processing ocean perch (redfish) since 1935 as filets for sale in midwest. Similar article in Down East, 4 pp., Ian.

From the Diminutive Sardine to the Tunny: Scenes in a Leading Portuguese Industry, 1 p. 111. London News, 21 Dec. 1957. Pictures with brief comments.

HUNT, FRED, The Great Guano Mutiny, MFC, March, Abortive plan in 1917 to seize Gloucesterman 'Ida S. Brooks' off Campeche and load her with guano.

KING, A. T., The Infant Mariner, 14 pp. Old-Time New England, Oct. Dec. 1957. Reminiscences of whaling voyage out of Fairhaven, by captain's daughter.

- Pacific Sea Otter Coming Back. N. Y. Times, 17 Nov. 1957, 1, 117. Historical sketch, indicating that 1912 law has prevented annihilation.
- MAILLART, ELLA, The Christian Fishermen of Malabar, 11 pp. Geog. Mag., Dec.
- McCracken, Harold, Hunters of the Stormy Sea, 312 pp. 158. London, Oldbourne, Russian sea-otter hunters, 1740-1840.
- SCAMMEL, G. V., The Herring Fishery: The Rise and Decline of a Great Industry, 2 pp. Shipping World, 2 April, 'By 1913, the industry was at its height.'
- SQUIRES, R. H., The Fisheries Training Programme of Newfoundland, 5 pp. Can. Geog. Jour., Feb. SUNDSTROM, G. T., Commercial Fishing Fessels and Gear (Fish & Wildlife Service Circular, 48), 48 pp. 40 cents. Washington, The Service, Sketches of contemporary types.
- Thomas, G. W., The Flying Fisherman, MCF, Feb. 'The short life of the high-lining halibut schooner "Mildred V. Lee," built 1891, lost with all hands 1895.'
- Weretster, G. R. G., Some Brief Notes on Fishing in China, 15 pp. Mariner's Mirror, Feb. 'The modes of fishing and the implements used at present vary not at all from those of ancient times, and the simplicity of the former and the ingenuity of the latter are as remarkable now as in the days gone by.'

VIa. Merchant Steam-North America and General

- ARMSTRONS, WARREN, The Collins Story, 192 pp. 18s. London, Robert Hale, 1957. Fictionalized account of E. K. Collins.
- BINTINGE-SMITH, JOAN, The Forcing Period: The American Merchant Marine, 1914-1917, unpub. Ph.D. thesis, Radeliffe. Detailed analysis of conditions in World War I when the United States was caught without adequate seagoing shipping, a situation which contributed to its sudden maritime regive.
- BIRGER, MEYER, Bell From the 'Mary Powell'... to be Placed in Museum, N. Y. Times, 12 May, 23.

 Presented to N. Y. Historical Society for its Port of New York Gallery, Picture of presentation, ibid., May 13, 50.
- BROWN, C. R., La Grande Duchesse, 4 pp. SBF, Sept. Built 1896 for Plant's Florida service; later 'City of Savannah' and then 'Carolina'; torpedoed in 1918.
- BURGES, R. H., Baltimore's First Police Boat. Baltimore Sunday Sun Mag., 23 Feb. Career of steam police boat 'Lannan.'
- CHASE, VIRGINIA, Shipwreck—The 'Portland' Disaster, 5 pp. Down East, Jan. Very detailed account of loss of Boston-Portland steamer, 26 Nov. 1898.
- FISSER, F. M., Tramp Shipping: Development, Significance, Market Elements, 271 pp., paper. 85-75.
 New York, Gregory Lounz, In German and English.
- HARTLEY, HERBERT, as told to Clinton Bonner, *Home is the Sailor*, 159 pp. \$3.50. Birmingham, Ala., Vulcan Press, Memoirs of former commander of 'Leviathan,' 'St. Louis,' and other American Fibras.
- HAYNE, F. B., ed., A Boy's Voyage to San Francisco, 1865-66, 8 pp. Cal. Hist. Soc. Quar., Sept. Diary of 12-year-old William B. B. Ingalls, on 'New York' to Aspinwall and 'Colorado' Panama to San Francisco.
- HUDSON, EDWARD, Ocean Air Travel Seen at New High. N. Y. Times, 26 Jan., v. 12. Transatlantic sea and air passages in 1957 at 1.030.000 and 1.023.000 respectively. 'Air transport has developed a separate travel market, among passengers with only limited time,'
- HUNN, MAX, Pan-Atlantic does it with Cranes, 5 pp. 858. Summer. Converted C-28 on N. Y.-Florida run carrying trailers lifted on and off by gantry cranes.
- McAdam, R. W., Salts of the Sound: an Informal History of Steamboat Days and the Famous Skippers who sailed Long Island Sound, 2nd edition, enlarged, 272 pp. \$5.00. New York, Stephen Daye,
- Morrison, J. H., History of American Steam Navigation, new edition, 630 pp. \$10.00. New York, Stephen Daye. New edition of valuable 1903 work, with foreword by Frank O. Braynard.
- PERRY, E. B., The U. S. Merchant Marine and Obsolescence, 8 pp. USNIP, Jan.
- Rare Old Painting Shows the 'Washington' Steaming into Bremerhaven. N. Y. Times, 26 Jan., v. 12. Reproduction of contemporary oil painting from collection of Frank O. Braynard showing arrival of first American subsidy liner in 1847.
- ROBERTS, G. O., The Admiral Line: A Short History of the Pacific Steamship Co., 8 pp. 8BF, Dec. 1957, March 1958.
- Ryan, J. J., Steam Tug Here Gives Way to Efficient Diesel. N. Y. Times, 29 Dec., v, 8. New York's

fleet of some 600 'puff boats' of the 1920's has dwindled to less than 50, while the diesel tugs, first appearing in 1925, number around 500.

- Ryper, F. V., Old Timer: Curtis Peck, 1842-1862, 2 pp. Motor Boating, April. Hudson River sidewheeler served later on James River and as tender to 'Merrimac' in her fight with 'Monitor.'
- STADUM, L. M., Union Steamships Limited of Vancouver, British Columbia, 2 pp. SBF, March. Fleet list, since 1889.
- TISCHENDORF, A. P., The Loss of British Commercial Pre-eminence in Mexico, 1876-1911. Inter-American Economic Affairs, Summer 1957.
- WETTERHAHN, A., et al., U. S. Standard Cargo and Passenger Ships, 1938-1956, 94 pp., paper. \$4.50. Hamburg, Eckhardt & Messtorff, Lists with full details nearly 5,000 ships, with 192 side-view drawings of various types. Includes English translation of any German text.

VIb. Merchant Steam-Other Regions

- ADAM, M., Compagnie de Navigation Mixte. 21 pp. Sea Breezes, March. Service since 1852, principally in Mediterranean but also to South America. Article by French admiral concentrates on ship details with virtually nothing on service.
- BUCKNALL, RIXON, Boat Trains and Channel Packets, London, Vincent Stuart.
- CARTER, C. J. M., The Stephenson Clarke Story, 52 pp. Sea Breezes, Jan., Feb. 'Oldest of all companies today forming the great Powell Duffy group is the fuel distributing and shipping organisation of Stephenson Clarke, Ltd., the largest firm of collier owners and managers in the U. K.' Fleet lists and numerous illustrations.
- DRURY, G. J., 50 Years of the Ouse Steamship Company, 13 pp. Sea Breezes, April.
- Flags of Convenience: A Study by the OEEC Maritime Transport Committee, 3 pp. Shipping World, 12 Feb. Also in D&HA, 3 pp., March.
- HOWARTH, C. E., Punkah Leads and Parrafin Lamps, 4 pp. Sea Breezes, April. Voyage as steward in Blue Funnel 'Polyphemus' to Far East in 1892.
- ISHERWOOD, J. H., The 'Czar' of 1912, 3 pp. Sea Breezes, Nov. 1957. Russian American Line, then Danish, Polish and British until 1949.
- Blue Funnel Liner 'Nestor,' 3 pp. Ibid., Dec. 1957. Australian service, 1912-50.
- Royal Mail Liner 'Avon,' 3 pp. Ibid., Jan. 1907-30.
- The 'Aurania' of 1883, 4 pp. Ibid., Feb. Cunard, 1883-1905.
- 'La Champagne' of 1886, 7 pp. Ibid., March. Served to 1915, with eight accidents.
- LEENDERTZ, MARTIN, Aged Liner's Grave, 2 pp. Sea Breezes, Dec. 1957. Remains of 'City of Lincoln,' formerly Guion 'Manhattan,' still near Capetown since going ashore in gale, 15 Aug. 1902.
- 'LIGHTERMAN,' pseud., A Pattern of Loyalty, 5 pp. PLA, Dec. 1957. Lascar seamen in British merchant marine; reproduced from Lloya''s List.
- OSBORN, E. C., A Ship of History, PLA, March. Finland Line's 'Arcturus' which brought officers from Libau in Dec. 1917 to organize new Finnish army of liberation; served until 1956.
- Shipping as an Export Industry, PLA, Jan. Its role as 'invisible export,' contributing £221,000,000 to U. K. balance of payments.
- Soule, Gardner, The Great Ice Fleet, 4 pp. 858, Summer, Ice-breaking Danish freighters of Lauritzen fleet, serving Finland, Greenland, etc.
- The Ship that came back from the Dead, 4 pp. Ibid. Halves of Niarchos supertanker 'World Concord' reassembled after she broke in two in Irish Sea, 27 Nov. 1954.
- THORNTON, E. C. B., Bombay Coastal Services, 15 pp. Sea Breezes, Dec. 1957.

VII. Inland Navigation

- Augsperger, O. B., Jr., Buffalo's Earlier Crossroads. Niagara Frontier, Summer 1957. Samuel Wilkeson, builder of Buffalo's harbor.
- BATES, A. L., Louisville, Bottleneck of the Ohio, 6 pp. S&S, Summer.
- Wharfmen, Watchmen and Roustabouts. Ibid. Old waterfront conditions at Louisville and other river ports.
- An Illustrated Steamboat Glossary, to pp. SBF, June, Sept., Dec. 1957. First installment already noted, XVII, 319.
- FOSCUE, LIELLAN, Life on River is Pleasant, Reporter Learns, 2 pp. Tow Line (Moran), Dec. 1957.

 Description of service of 'David E. Moran' between Memphis and Mt. Vernon, Ind.
- HANCOX, P. R. & J. M., Pennine Passage, 6 pp. Sea Breezes, Dec. 1957. Trip across England through canals from Goole to Liverpool through Leeds.

- HEYL, ERIK, 'The 'City of Buffalo': Last of the Great Lakes 'Palace Steamers,' Niagara Frontier, Spring 1957, 1857-66.
- Hill, F. G., Roads, Rails and Waterways: The Army Engineers and Early Transportation, 248 pp. \$4.00. Norman, Univ. of Oklahoma Press. See also Maass, XII, 167.
- HUBER, L. V., Heydey of the Floating Palace, 15 pp. American Heritage, Oct. 1957. Mississippi steamboats of mid-19th century; profusely illustrated in color.
- LANDON, FRED, The Loss of the 'Bannockburn,' 3 pp. Inland Seas, Winter. Disappeared in Lake Superior night of 21 Nov. 1902 with wheat from Port Arthur.
- McDonald, W. A., The Burning of the 'Phoenix,' 10 pp. Inland Seas, Spring, New twin-screw steamer; burned 12 Nov. 1847 on Buffalo-Chicago run.
- McGarity, D. J., Last Trip of the SS 'Atlantic,' 11 pp. *Duland Seas*, Winter, Burned 18 March 1906 en route Sheboygan to Chicago; crew saved by tug.
- MILLER, E. C., ed., Down the River—A Rafting Journal of 1859, from Warren, Pa. to Louisville, Ky., 14 pp. Western Pa. Hist. Mag., Fall 1957.
- Port of Buffalo, 7 pp. World Ports, Jan.
- REVES, H. F., Deep Draft on the Detroit, 11 pp. Inland Seas, Spring.
- Luxury Liner of the Lakes, 5 pp. Se's, Summer. 'Aquarama,' formerly C-4 ocean freighter 'Marine Star,' on daytime Detroit-Chicago runs.
- RAPP, M. A., New York's Trade on the Great Lakes, 1800-1840, 12 pp. N. Y. History, Jan.
- SUNIOR, NORMAN, The Canals of England, 8 pp. Can. Geog. Jour., April.
- SLOANE, ERIC, The Farmington Canal, 3 pp. American Heritage, Fcb. New Haven-Northampton.
- SMITH, G. S., First U. S. Lighthouse on the Great Lakes, 1 p. 858. Summer. At entrance to Buffalo, 1818.
- TRESCOTT, P. B., The Louisville & Portland Canal Co., 1825-1874, 23 pp. Miss. Valley Hist. Rev., March.
- WILLIS, R. B., Steamers at Pointe aux Pins, SBF, March, Lake Huron service from Cheboygan, 1888-
- WILLIAMS, W. R., The New England Transportation Company, 5 pp. Inland Seas, Spring. Operated five 'passenger and freight canallers' on Great Lakes in 1886's.
- WOOD, R. G., Construction of the Louisville and Paducah Marine Hospitals, Ky. Hist. Soc. Register, Jan. 1845-52, by Major Stephen Long.
- Young, Anna, Captains in Procession, 4 pp. Inland Seas, Winter, Discussion of various Canadian masters on Great Lakes.
- ZHINER, A. T., The Great Ship 'Secandbee,' 5 pp. Inland Seas, Winter.

VIIIa. Seaports and Coastal Areas-North America

- BEAM, LURA, A Maine Hamlet, 248 pp. \$3.50. New York, Funk. 1957. Reminiscences of Machias around 1900.
- Brier, H. M., Sawdust Empire: the Pacific Northwest, 294 pp. \$5.00. New York, Knopf.
- California School Supervisors Assa. Harbors of California, 80 pp. \$2.95. Puente, Calif., Carl J. Leibel. Chapters on each of California's major harbors, including history; written for fourth grade.
- CURRIE, A. W., The Grand Trunk Railway of Canada, 564 pp. \$8.50. Univ. of Toronto Press. Includes material on Portland, Maine, as winter port of Montreal.
- DUNSHEE, K. H., Old Hanover Square, 2 pp. Grace Log, March-April, Includes 1787 map of vicinity near tip of Manhattan, showing location of various merchants, etc.
- EASIMAN, R. M., Pilots and Pilot Boats of Boston Harbor, 91 pp. Boston, Second Bank-State Street Trust Co., 1956.
- General D. R., The Port of Portland, 4 pp. *Down East*, March. Development of leading Maine port since World War II; see also Albion, XIV, 209.
- GRANBERG, W. J., Victoria and Nanaimo, 5 pp. S&S, Summer. Two ports of Vancouver Island.
- HARTMAN, WILLIAM, Custom House Patronage under Lincoln, 17 pp. N. Y. Hist. Soc. Quar., Oct. 1957.
- HAZELTINE, JEAN, The Discovery and Cartographical Recognition of Shoalwater Bay, Oregon Hist. Outr., Sept. 1957.
- JOHNSON, S. R., Shipping's Role in State Economy. Portland (Maine) Press Herald, 24-29 Jan. Five articles on conditions at Portland, Searsport, and other Maine ports, including considerable statistical data.

JONES, IDWAL, POrt-Captain Ridley. Westways, March. San Francisco on the eve of the United States occupation in 1846.

MITCHELL, CARLETON, The Bahamas, Isles of the Blue-green Sea, 48 pp. Nat. Geog., Feb.

MOORE, K. H., The Winter Journey of John A. Poor, 3 pp. *Down East*, March. Wild trip of Maine lawyer through White Mountains in blizzard of February 1845 to Montreal, resulting in Portland rather than Boston becoming that city's winter port. See also Currie above.

NOBLE, J. W., San Francisco's Magic Fog, 3 pp. Sat. Evening Post, 4 Jan. Port of Tampa, 3 pp. World Ports, Feb.

Rip-Roaring Day at Ripple Rock, 5 pp. Life, 28 April. Destruction of menace to navigation in Seymour Straits; pictures with brief comments. See also Carriere, XVII, 237.

STONE, P. M., The Boston Waterfront at the Turn of the Century, 6 pp. SBF, Sept., Dec. 1957.
WARNER, OLIVER, Voyaging to York Factory. The Beaver, Winter. One of nine articles on various stages of history of York Factory on Hudson Bay, recently closed as trading post.

WIEGAND, G. G., Some Elements in the Study of Port Geography, 16 pp. Geog. Rev., April.
WITKIN, RICHARD, New Port Shares Carnaveral Boom. N. Y. Times, 8 March, 30. Port Carnaveral, Fla.

VIIIb. Seaports and Coastal Areas—Other Regions

Aberdeen in the Seventies, 1 p. Sea Breezes, Feb. Reproduction of prints showing harbor full of square-riggers. Further comments, 2 pp., ibid., March.

BREWER, S. P., Danes Unearth Bahrein History, N. Y. Times, 30 March, 1, 5, Danish archaeological expedition discovers that island in Persian Gulf goes back 5,000 years as trading center.

BUNSEN, MARY DE, Lord Howe Island Today, and Its Early Settlers, to pp. Geog. Mag., Jan. 480 miles from Sydney; discovered in 1788, settled around 1840.

BUNSTER, ENRIQUE, Valparaiso, Port with a Past, 6 pp. Americas, Oct. 1957.

CATENA, M. M., The Port of Cadiz, 6 pp. D&HA. Jan.

COURSE, A. G., Docking and Undocking Ships in London, 3 pp. PLA, Dec. 1957.

DE LEEUW, HENDRIK, Crossroads of the Zuider Zee, 377 pp. \$3.75. New York, Arco, 1977. Includes historical sketches of several Dutch seaports.

Drury, G. J., Sixty Miles from Spurn, 20 pp. Sea Breezes, Nov. Brief history of port of Goole on the

Ouse and the vessels trading from it.

FERDON, E. N., Jr., Pitcairn Island, 1956, 17 pp. Geog. Rev., Jan.

HANCE, W. A., & VAN DONGEN, I. S., Matadi, Focus of Belgian African Transport, 32 pp. Annals Assn. of American Geographers, March. See also XVIII, 94-95.

HENMAN, P. S., Lighters and Lighterage, with Special Reference to the Port of London, 5 pp. D&HA, March. Also in Shipping World, 2 pp., 8 Jan.

HICKS, ERIC, H. M. Customs and the Thames, 3 pp. PLA, Feb. History from the time of Chaucer. KROEBER, C. B., The Growth of the Shipping Industry in the Rio de la Plata Region, 1704-1860, 203 pp. \$4.50. Madison, Univ. of Wisconsin Press. Important contribution to a neglected field: surveys ownership, commodities transported, foreign participation, expansion, and the struggle for free navigation of waterways. See also Albion, XII, 165.

MASON, JOHN, The History of Trinity House of Leith, 194 pp. 108 fd. Glasgow, McKenzie & Vincent. MINCHINTON, W. E., ed., The Trade of Bristol in the Eighteenth Century, 210 pp. £2 28. Bristol Records Soc. Reproduces many letters and other documents. Introduction includes general survey of Bristol's declining trade in the century, the trading organization, and an account of documents preserved at Bristol and elsewhere.

MACKIE, T. L., The Port Health Authority, 3 pp. D&HA, Nov. 1957.

The Port of Singapore, 8 pp. D&HA, Feb. Port of Tokyo, 2 pp. World Ports, Feb.

RONAN, T. P., Milford Haven's Scaport Hopes are Revived by Super-Ship Era. N. Y. Times, 26 March, 65.

Szceraniak, T., The Ports of Poland: Post-war Organisation and Economic Problems, 5 pp. D&HA. Nov.

PORTER, P. A., The Gulf of Aqaba: An International Waterway: its Significance to International Trade, 18 pp., paper, 50 cents. Washington, Public Affairs Press.

SEYMOUR, JOHN, The Wash and its Rivers, 14 pp. Geog. Mag., March.

TOURNIER, J. L., The Port of Abidjan: Development of Harbour Facilities in French West Africa, 4 pp. D&HA, March.

IX. Shipbuilding and Allied Topics

- BAKER, W. A., The New 'Mayflower': Her Design and Construction, by her Designer, 164 pp. \$8.00. Barre, Mass., Barre Gazette. One of the most valuable by products of the much-publicized venture, based on exhaustive research in early 17th-century ship construction by a naval architect on the staff of the great Bethlehem-Quincy yard. Part I: History, Ch. 1. The Search: 2, Early 17th Century Ship Design: 3, The Arrangement and Construction of Early 17th Century Ships: Part II, Designing and Building the New Ship, Ch. 4, Dimensions and Lines; 5, Arrangement and Fittings; 6, Masting and Rigging: 7, Building and Trials. Appendix A, Lines: B, Rigging: C, Models of the New Mayflower, Four large plans in pocket.
- BENTINGK-SMITH, JOAN, see Sect. Via. Chapters on wooden and steel shipbuilding.
- BUILLIHM STITE Co., Shippi upono Div., Bethlehem Built, 36 pp., paper. Free, New York, The Company, Photographs of vessels built by Bethlehem yards since 1939, including warships and merchant vessels.
- BURGESS, R. H., Former Shipyard Figurehead Carver Still Plies His Trade. Newport News Daily Press, 8 Dec. 1957, W. W. Geggie carves massive sea horse figures for Mariners' Museum.
- Figureheads—Guardians of the Deep. Toleda Blade, 1 Dec. 1957. Review of figurehead origin and tradition.
- Centenary of Nagasaki Shipyard: Mitsubishi Yard Oldest and Largest in Japan, 3 pp. Shipping World, 8 Jan.
- CHAPMAN, At, Architectura Navalis Mercatoria (Facsimile of 1768 edition), \$18.50. Available from K. F. Wede, Saugerties, N. Y. Atlas with 153 plans of ships, together with technical data, drawings, and 24 sail plans. Table of contents in English, Swedish, and French.
- FORGERON, H. V., Fyfe's Shipyard is Busy Throughout Winter. N. Y. Times, 29 Dec. 1957, v. 6. History of yard on Hampstead Harbor, L. L., established by shipbuilder from the Clyde in 1906, specializing in yacht construction.
- Gull, C. S., ed., Steel's Elements of Maximaking, Sailmaking and Rigging (Facsimile of 1794 edition), 384 pp. \$17.50. Available from Karl F. Wede, Saugerties, N. Y.
- GRMIAM, G. S., The Transition from Paddle-Wheel to Screw Propeller, 14 pp. Mariner's Mirror, Feb. Slow experience of Royal Navy in mid-19th century, depending in part on the introduction of iron hulls.
- LADAGE, JOHN, For Smoother Sailing, SZS, Summer, Costa bulbs and other anti-vibration devices.
- (LYMAN, JOHN), The Shipbuilders of Humboldt Bay, VII, Thomas H. Petersen, 4 pp. Log Chips, Feb. Sec also Sect. IV.
- Modernisation of British Shipyards, 8 pp. Shipping World, 8 Jan.
- PARIS, Admiral, Souvenirs de Marine, 1881-1892, 26 sheets. \$5,00. Available from Karl F. Wede, Saugerties, N. Y. Selections of 26 ships' lines drawings, of various types from 16th to 19th centuries, taken from original 6-volume work. Table of contents and glossary in French, English, and German.
- PHILLIPS-BIRL, D. H. C., The Naval Architecture of Small Craft, 367 pp. \$15.00. New York, Philosophical Library.
- POLLARD, SIDNEY, British and World Shipbuilding, 1890-1914, 19 pp. Jour. Econ. Hist., Sept. 1957-Based on Ph.D. thesis, Univ. of London, The Economic History of Shipbuilding, 1870-1914.
- SMITH, H. A., The Haunted House of Ingalls, 9 pp. Fortune, May. Outspoken comments on control of the great shipvard at Pascagoula, Miss.
- Tyler, D. B., The American Clyde: A History of Iron and Steel Shipbuilding on the Delaware from 184 to World War I, 132 pp. \$5,00. Univ. of Delaware Press. Prepared under a grant from Henry B. DuPout, during which the author was Visiting Professor at the Univ. of Delaware, it covers the shipyard activity of Wilmington, Chester, and Philadelphia. See also XVI, 72.
- WAGGONER, W. H., Dutch Test Models of New Ships in Basin Imitating Fury of Sea. N. Y. Times, 26 Jan., v. 12. New 'Seakeeping Laboratory' of Netherlands Ship Model Basin Foundation, established in 1933 at Wageningen.

X. Naval to 1939—North America

- BEARS, E. C., Civil War Operations In and Around Pensacola, 4 pp. Fla. Hist. Quar., Oct. 1957.
- BIAKENTY, JANE, Heroes: U. S. Marine Corps, 1861-1955; Armed Forces awards, Flags, Reference Book, 621 pp. \$10.00. New York, Blakeney.

BOLANDER, L. H., 'Better than anything we have,' 3 pp. Shipmate, Feb. Enthusiastic comments of Captain Goodenough, RN, after visit to U. S. Naval Academy, then at Newport, in 1864.

Braisted, W. R., The United States Navy in the Pacific, 1897-1909, 282 pp. \$5.00. Austin, Univ. of Texas Press. See also XVIII, 96.

BUTLER, H. V., JR., USN, Manila Bay-1 May 1898; An Unpublished Eye Witness Account, 2 pp. Shipmate, May, Letter to his mother by ensign (later vice admiral) on 'Olympia,' describing the

CAGLE, M. W., Lieutenant David Dixon Porter and His Camels, 7 pp. USNIP, Dec. See also Fornell, XV, 313; Lammons, XVII. 322.

CAMPBELL, ALFC, The Spanish American War, 1898, 9 pp. History Today, April.

CARSE, ROBERT, Blockade: The Civil War at Sea, 279 pp. \$5,00. New York, Rinehart. Printed in green ink on green paper.

CATTON, BRUCE, The Baffling War of 1812, 13 pp. Holiday, May. 'It was the strangest and most misunderstood war in our history. . . . It paved the way for America's present greatness

COGGESHALL, GEORGE, Journal of the Letter-of-Marque Schooners 'David Porter' and 'Leo' in the Years 1813 & 1814, 21 pp. American Heritage, Oct. 1957.

COLETTA, P. E., USNR, The Destroyer Tender, 18 pp. USNIP, May, Historical sketch and picture section.

COLWELL, D. G., USNR, see Sect. II.

EMMONS, THORNTON, & VOTAW, H. C., More on the 'Ewing' Mutiny, 6 pp. Cal. Hist. Soc. Quar., Dec. 1957. The mutiny 'arose from the popularly held wish to reach the mines not from ill-will against the service or officers involved. And to brighten further the record of our sailors, all 5 were foreign subjects.' See also XVI, 148.

FIELD, J. A., JR., A Scheme in Regard to Cyrenaica, 13 pp. Miss. Valley Hist. Rev., Dec. 1957. Lively account of intrigues and adventures of Michel Vidal, U. S. Consul at Tripoli in 1870's, including

project to acquire a naval base for the Mediterranean station.

FREDERICKS, P. G., About the S-4, 2 pp. N. Y. Times Mag., 15 Dec. 1957. Sinking and ultimate raising of U.S. submarine off Provincetown, 1927.

GLEASON, E. H., USN, The Advance of Naval Preventive Medicine, 7 pp. USNIP, March.

GLEASON, MORIECE, How Soucek Broke the Record, 7 pp. USNIP, April. Naval aviator set altitude record in 1929 and again in 1930.

GREENWOOD, J. E., USMC, Seventy-five Years of Academy Marines, 4 pp. Shipmate, Nov. 1957. 50 Annapolis graduates were commissioned in Marine Corps, 1883-97, including five future commandants: Barnett '81, Lejeune '84, Fuller '89, Neville '90, and Russell '92.

HALE, W. H., When Perry Unlocked the 'Gate of the Sun,' 20 pp. American Heritage, April. Reproduces in color numerous contemporary Japanese pictures of the Americans and their ships.

HOLZMAN, R. S., Ben Butler in the Civil War, 16 pp. New England Quarterly, Sept. 1957. The Navy had to work with the troublesome political general at New Orleans, Fort Fisher and elsewhere. Krec, Theodore, S. S. 'Itata'-Cargo War! 2 pp. Westways, Jan. Scizure of arms cargo for Chilean rebels by USS 'Charleston' in 1891, leading to 'Baltimore' riot at Valparaiso.

LUCKOCK, W. J., USN, The Dungaree Navy, 3 pp. The Shipper, March. Life in the early destroyers in World War I.

MONTROSS, LYNN, Amphibious Doubleheader, 8 pp. Marine Corps Gazette, April. Simultaneous American attack on Fort George and British attack on Sackett's Harbor at opposite ends of Lake Ontario, May 1813. Motzon, H. A., The Ship 'Prosper,' 1775-1776, 10 pp. So. Carolina Hist. Mag., Jan. Undistinguished

career of ship of South Carolina state navy.

PARMENTER, IRVING, The Battle of Sandy Creek, 2 pp. USNIP, Jan. Unsuccessful British attempt to intercept American material en route to Sackett's Harbor, 30 May 1814. QUARLES, BENJAMIN, The Abduction of the 'Planter,' 6 pp. Civil War Hist., March. Seizure of 5 gun

Confederate steamer at Charleston, 13 May 1862, and her delivery to Union fleet.

RUNYAN, C. F., USMC, Capt. McLane Tilton and the Korean Incident of 1871, 35 pp. Marine Corps Gazette, Feb., March.

SIMS, LYDEL, The Submarine that Wouldn't Come Up, 8 pp. American Heritage. The Confederate 'Huntley.'

Snowbarger, W. E., Pearl Harbor in Pacific Strategy, 1898-1908. Historian, Aug. 1957. See also Braisted above.

Stangler, J. G., USN, The Great Battleship Holdup, 1 p. Shipmate, May, Unsuccessful attempt of enlisted man to steal pay funds of 'California' at pistol point, 1935.

STACEY, C. P., Another Look at the Battle of Lake Eric, 11 pp. Can. Hist. Rev., March. It was 'more a logistical than a tactical victory' resulting from 'the growing industrial resources of the United States at large, combined with relatively energetic naval administration at Washington and on the lakes.'

STRATTON, D. H., Behind Teapot Dome: Some Personal Insights. Business Hist. Rev., Winter. From Ph.D. thesis, noted XVIII, 97; see also Noggle, ibid., 96.

STRICKLAND, ALICE, Blockade Runners, q pp. Fla. Hist. Quar., Oct. 1957. Emphasis on activities around Mosquito Inlet and New Smyrna on Florida coast.

SZCESNIAK, BOLESLAV, Letters of Homer Crane Blake concerning his Naval Expedition to China, Japan and Korea, 1869-1872. Monumenta Nipponica, April-July 1957. Commodore Blake was one of the first graduates of Annapolis.

TYLER, D. B., see Sect. IX. Ch. 3, Ironclads and Monitors; 7, Roach and the Navy Dept.; 8, Roach and Whitney.

U.S.S. 'Hartford,' 1858-1956, 4 pp. Connecticut Hist. Soc. Bulletin, April 1957.

VOTAW, H. C., The 'Independence,' our first Ship of the Line, 3 pp. USNIP, April.

WEEMS, J. E., The Fate of the 'Maine.' Sg.95. New York, Holt. 'From the laying of her keel in 1888 to her final burial at sea in 1912.'

Witson, C. H., Who Captured New Amsterdam? 5 pp. English Hist. Rev., July 1957. Not Robert Holmes, as often claimed, at the time he was operating on the Guinea Coast, but Richard Nicholls, whose expedition 'was for this early piratical Restoration period a remarkably sober and carefully calculated affair.'

The Yeomanettes of World War I (Pictorial Section), 7 pp. USNIP, Dec.

XI. Naval to 1939-Other Regions

Anderson, R. C., Spanish Propaganda after Trafalgar, 4 pp. Mariner's Mirror, Feb. Translation of pamphlet detailing alleged damage to British fleet—outrageously exaggerated and including ships not even present at battle. 'The total casualties are given as 5,074 killed, 2,064 drowned, and 3,333 wounded.'

BARNES, W. E., Changing Trends in the Mediterranean Balance of Power, 1935-1957, 10 pp. USNIP, March. Italian ambitions in 1930's and now 'struggle between the Free World and Soviet Russia.'
The 'Bounty's' Last Relics, 4 pp. Life, 10 Feb. Colored illustrations of discovery of anchor and other

remains of famous ship burned at Pitcairn's Island.

BOXER, C. R., M. A. DeRuyter, 1607-1676, 15 pp. Mariner's Mirror, Feb. Biographical sketch of the

great Dutch admiral.

FISHER, SIR GODEREY, Barbary Legend: War, Trade and Piracy in North Africa, 1415-1830, 349 pp. \$8.00. New York, Oxford Univ. Press, 1957. Wealth of new material on 16th and 17th centuries, particularly in relations with Levant Company. Persistent attempt to whitewash the corsairs. Author tends to lose interest in the story after 1700 when the corsairs stopped bothering the British and French, turning their attention to ships of weaker nations.

GILL, CONRAD, The Affair of Porto Novo: An Incident in Anglo-Swedish Relations, 18 pp. English Hist. Rev., Jan. In 1734. Swedish East India Co. ship 'Ulrica Eleanora' driven off from Coromandel port by British and French.

HOLHLING, A. A., Lonely Command. 15s. London, Cassell, 1957. The celebrated raiding of the

Cruiser 'Emden' in 1914. HUGHES, EDWARD, ed., The Private Correspondence of Admiral Lord Collingwood (Navy Records

Soc. Pub.), 348 pp. 459 to nonmembers. London, The Society.

KERR, J. L., & GRANVILLE, WILLELD, The RNTR, A Record of Achievement, 304 pp. 215. London, Harrap, The 'wavy navy,' which furnished go per cent of the Royal Navy's officers in World War II, was established in 1902 by Beresford.

LIPSCOMB, FRANK, RN, The 'Victoria' and the 'Camperdown,' 10 pp. USNIP. Jan. Sinking of flagship of British Mediterranean fleet, 22 June 1893, with loss of 359 lives including the C-in-C whose stupid stubbornness caused collision. Includes full account of court martial proceedings. See also Baldwin, XVI, 74.

1 LOYD, CHRISTOPHER, Sir Francis Drake, 144 pp. 128 6d. London, Faber, 1937.

Lowis, G. L., RN, Fabulous Admirals and Some Naval Fragments, 21s. London, Putnam. Lively service anecdotes about some of the choicer characters.

MACKESY, PHRS, The War in the Mediterranean, 1803-1810, 430 pp. \$8.00. Harvard. Already noted in British edition, XVIII, 97.

MARCUS, G. J., Sir Clowdesley Shovel's Last Passage, 9 pp. Jour. Royal United Service Inst., Nov. 1957. Part of British fleet, returning from Mediterranean in 1707, lost, together with its admiral, in falty landfall at entrance to English Channel.

(Martellhe, Jean), Galley Slave: The Autobiography of Jean Marteilhe, ed. Kenneth Fenwick, 182 pp. \$3.75. New York, Folio Society & Philip Duchesne, 1957. Detailed and graphic account of existence in French galleys by Huguenot who served 1700-12.

NEWBURY, C. W., Aspects of French Policy in the Pacific, 1853-1906, 12 pp. Pacific Hist. Rev., Feb. The Old 'Cornwallis,' 1 p. Sea Breezes, Jan. Dismantling at Sheerness of veteran 74, built at Bombay in 1813; also in Ill. London News, 2 pp., 22 Feb.

Parkes, Oscar, British Battleships Warrior 1800 to Vanguard 1050. A History of Design, Construction and Armament, 701 pp. £6 6s. London, Seeley, Comprehensive coverage, 30 years in preparation. 'It is bursting with illustrations, facts, anecdotes, plans, and comparisons.'

PENN, GEOFFREY, Snotty: The Story of the Midshipman, 16s. London, Hollis & Carter, 1957.

REDDAWAY, T. F., Sir Christopher Wren's Navy Office, 14 pp. Bull. Inst. of Historical Research, Nov. 1957. Corner of Seething Lane and Crutched Friars, completed 1683 to replace old office, where Pepys held forth, burned in 1673.

ROBINSON, M. S., see Sect. XIV.

Roop, H. W., USAR, How the Royal Navy Met the Challenge, 12 pp. USNIP, Feb. Successive steps in development during the three decades before 1914.

ROSKILL, S. W., RN, HMS Warspite.' The Story of a Famous Battleship, 319 pp. 25s. London, Collins. Roskill, author of official The War at Sea, was her gunnery officer in 1936. Includes account of earlier 'Warspites.'

Siney, M. C., Allied Economic Warfare in World War I. Michigan Alumni Quar. Rev., Summer 1957. See also XVII, 322.

Svenson, Sam, The Swedish Ship 'Wasa' of 1628, 2 pp. Mariner's Mirror, Feb. Three-decked ship of the line, capsized in Stockholm harbor on maiden trip; recent location of well-preserved hull and projects to salvage it.

TREMATON, GEORGE, In the Reign of Anne, 6 pp. Sea Breezes, Dec. 1957. Passages from logbook kept by John Tregelles aboard four vessels of Royal Navy, 1703-07.

UNDERWOOD, H. H., Yi Sun Sin and the Naval Campaigns of 1592-98, 4 pp. Korean Survey, Feb. Adapted from Transactions of the Korean Branch of the Royal Asiatic Society, vol. 23 (1934) Vale, V., Clarendon, Coventry and the Sale of Naval Offices, 1660-8, Cambridge Hist, Jour., X11,

No. 2, 1956.

WETTERN, DESMOND, Scapa Flow, 1913-1957, 7 pp. USNIP, Dec.

WILSON, CHARLES, Profit and Power: A Study of England and the Dutch Wars, 169 pp. \$5,00. New York, Longmans. Analyses why-not how-these wars were fought. Does not include third war. YANDELL, FREDERICK, An Upturned Boat, 2 pp. See Breezes, Dec. Torpedoing of 'Royal Edward' near Dardanelles, 13 Aug. 1915, told by only survivor of engine-room crew.

XII. World War II

ARONSON, A. A., The 'Burza' was a Destroyer, 13 pp. USNIP, Jan. Escape of Polish destroyer to England in 1939 followed by service in Polish Navy in Exile with Royal Navy. ASHWORTH, F. L., USN, Dropping the Atomic Bomb on Nagasaki, 6 pp. USNIP, Jan.

BARNES, W. E., see Sect. XI.

Butler, J. R. M., Grand Strategy, Vol. II, September 1939-June 1941 (History of the Second World War, United Kingdom Military Series), 603 pp. \$7.82, London, HMSO; New York, British Information Services, 1957. See also Ehrman, XVII, 82.

CHIHAYA, MASATAKA, Mysterious Withdrawal from Kiska, 13 pp. USNIP, Feb. COWIE, J. S., RN, British Mines and the Channel Dash, 9 pp. USNIP, April.

CREIGHTON, SIR KENELM, RN, Convoy Commodore. 18s. London, Kimber.

Ennis, John, Disaster in Bombay Harbor, 11 pp. Reader's Digest, April. 'Hushed-up' explosion, 4 April 1944, following fire on munitions ship. See also Oliver, XVII, 241. GORDON, O. L., RN, Fight it Out. 18s. London, Kimber, 1957. War experiences, including loss of

cruiser in Java Strait followed by imprisonment by Japanese.

HAMPSHIRE, A. C., Liliput Fleet, 204 pp. 18s. London, Kimber. Story of the trawlers of the Royal Naval Patrol Service.

HORNE, G. F., Northwest Africa: Seizing the Initiative in the West (U. S. Army in World War II,

vol. 37; Mediterranean Theater of Operations), 771 pp. \$7.75. Washington, GOP for Chief of Military History.

JULLIANN, MARCH, tr. from the French by Merwyn Savill, H. M. S. Fidelity, 223 pp. \$3.75. New York, Norton, 1957. Former French freighter, sunk in 1942.

KEMP, P. K., RN, Key to Victory: the Triumph of British Sea Power in World War II, 382 pp. \$6.00. Boston, Little, Brown.

KRANCKE, T., & BRENNICKE, H. J., Pocket Battleship: The Story of the 'Admiral Scheer,' 239 pp. \$3.95. New York, Norton. Already noted under British title, The Battleship Scheer, XVII, 166.

McKEF, ALEXANDER, The Coal Scuttle Brigade, 223 pp. 18s. London, Souvenir Press, 1957. Wartime collier service between Newcastle and the Isle of Wight; also gives picture of coastal towns.

MARSH, JOHN & A. L., Skeleton Coast. \$3.50. New York, Dodd, Mead. Ordeal of survivors of wartime shipwreck on desolate coast in Southwest Africa.

MARSHALL, W. L., Japanese Treasure Hunt in Manila Bay, 11 pp. USNIP, March. Efforts to recover the millions of silver pesos dumped by Americans in deep water just before fall of Corregidor in 1912.

McCandless, Brece, USN, The Battle of the Pips, 8 pp. USNIP, Feb. American warships fire at non-existent targets indicated by radar off Kiska in 1943.

MILNER, SAMLEL, Fictory in Papua (U. S. Army in World War II: The War in the Pacific), 409 pp. \$6.00. Washington, GOP for Chief of Military History.

Mortson, S. E., Strategy and Compromise, 120 pp. 83.00. Boston, Little, Brown, Examination of Allied military strategy and political compromise in World War II.

Elba Interlude, June 1944, 6 pp. Military Affairs, Feb.
OHMAF, T., ex-IJN, ed. Roger Pineau, The Battle of Savo Island, 17 pp. USNIP, Dec.

PARKES, OSCAR, See Sect. XI.

POPE, DUDLEY, 73 North, 18s. London, Weidenfeld & Nicolson, 1957. Naval conflict in the Arctic.

PUGSLEY, A. F., RN, Destroyer Man. 18s. London, Weidenfeld & Nicolson, 1957.

ROSKILL, S. W., see Sect. XI.

SIRLD, RONALD, Enemy Engaged, 205 pp. 18s. London, Kimber, 1957. Mediterranean experiences in HMS Eurylaus.

Stonum, G. M., USN, A Flagship View of Command Decisions, to pp. USVIP, April, Analysis of several wartime decisions in which the author participated—Marcus Island raid, Doolittle raid, Battle of Midway, 'Marianas Turkey Shoot.'

TAYLOR, THEODORY, Fire on the Beaches, 298 pp. \$3,95. New York, Norton, American merchantmen and U-boats.

TENNIS, M. H., JR., USNR, LCTs in a Typhoon, 5 pp. USNIP, March.

THOMPSON, R. W., The Eighty-five Days: The Story of the Battle of the Scheldt, 220 pp., paper, 50 cents. New York, Ballantine Books, Allied efforts to clear port of Antwerp in Sept, and Oct. 1944.
TULEJA, T. V., USN, Twilight of the Sea Gods, 284 pp. \$3.95. New York, Norton, Leaders and

battles of the German Navy in World War II. See also Ruge, XVIII, 98.

Young, Peter, Storm from the Sea. 188. London, Kimber, 1957. Commando raids, from Norway to Burma.

ZURCHER, ANNA, ed. Norman Lee, 'City of New York' Torpedoed; Survivors Begin 13 Terrifying Days Aboard Lifeboat, 8 pp. Favrell Lines News, July, Oct. 1957; Jan., May 1958. Diary of Swiss woman describing ordeal, in which 9 out of 20 died, in boat from American South African liner torpedoed off Hattaras, 29 March 1942.

XIII. Postwar Naval

ANDERSON, G. W., USN, The Pacific Command, 1958, 3 pp. Shipmate, March. Recent extension of its scope from the North Pole to the South Pole, and from the West Coast of the United States to the shores of Asia.'

BALDWIN, H. W., New 'Battleship'—the A-Submarine, 3 pp. N. Y. Times Mag., 16 March. Similar in N. Y. Times, 11, 12 March.

———— New Jobs for Old Ships. Ibid., 10 April. 'Battleships and carriers may be used to supply fleet.'

BARNES, W. E., see Sect. XI.

BRINKLOE, W. D., USN, The Frigate, 2 pp. USNIP, March. Discussion of the new 'DL' superdestroyers.

CAGLE, M. W., USN, Errors of the Korean War, 6 pp. USNIP, March. 'The gravest error of the Korean War can be summed up in one word: timidity,' See author's book on the war, XVII, 324.
CORNELIUS, GEORGE, USN, Something's Doing in LTA, 6 pp. USNIP, Jan. Postwar naval developments in lighter-than-air.

DAVIS, G. H., Polaris—the U. S. Navy's New Missile, 2 pp. Ill. London News, 19 April. Diagrams with brief comments.

GARTHOFF, R. L., Sea Power in Soviet Strategy, 10 pp. USNIP, Feb. From his forthcoming volume, Soviet Strategy in the Nuclear Age.

HATCHER, C. M., The Navy Electronics Laboratory, 7 pp. Bureau of Ships Jour., Jan.

HOSMER, CRAIG, USNR, Nuclear Power for the Navy, 7 pp. USNIP, May.

Lemieux, C. P., The 'Red Fleet' Ten Years After, 6 pp. USNIP, April.

LIPSCOMB, F. W., RN, The Fleet Air Arm in the Operations at Suez. 7 pp. Marine Corps Gazette, March.

McWerhy, R. D., USN, Significance of the 'Nautilus' Polar Cruise, 4 pp. USNIP, May.

Naval Air Station, Alameda, 8 pp. USNIP, Jan.

PALMER, C. B., Our Newest A-Sub: the 'Skate,' 2 pp. N. Y. T. Mag., 2 Feb. Seven pictures, with brief comment.

PHILLIPS, C. E. L., & KERANS, J. S., RN, Escape of the 'Amethyst.' 274 pp. \$3,95. New York, Coward-McCann. Attack on British frigate on upper Yangtse in 1949, with her final escape from Communists after 100 days.

Rebuilt and Now Completely Modernised: HMS 'Victorious,' 1 p. Ill. London News, 11 Jan. Six pictures of carrier, with brief captions.

Rowan, C. T., Those Navy Boys Changed my Life, 6 pp. Reader's Digest, Jan. Experience of one of the first Negroes to serve as a naval officer.

Royal Canadian Navy-Atlantic, 10 pp. USNIP, March. Pictorial Section.

The Sad Fate of the Battleship: Two of the Doomer 'King George V' Class Go to the Breakers, 1 p. Ill. London News, 8 March. Pictures of HMS 'Anson' and 'Duke of York' at Falsane, with brief comments, Picture of 'King George V' at Dalmuir, ibid., 1 Feb.

SCHOFIELD, B. B., RN, Britain's Postwar Naval Policy, 8 pp. USNIP, May,

SMITH, DIEKEY, Cat Brown—Master of the Mediterranean. 6 pp. Reader's Digest, March. Sixth Fleet. Thursfield, H. G., RN, see Sect. XVI.

U. S. Submarine Base, New London, 12 pp. USNIP, Feb. Pictures with brief text.

A Victim of the Naval Economies: The Dockyard at Sheerness which will be closed by April, 1960, 1 p. Ill, London News, March, Aerial views, with brief comments.

XIV. Marine Art, Ship Models, Collections, Exhibits

BAKER, W. A., see Sect. IX.

BOWNESS, EDWARD, 'Cutty Sark,' 4 pp. Model Engineer, 20 Feb. The first of a series of articles on building a model of the celebrated British clipper.

BIRGER, MEYER, see Sect. VIa.

BURGESS, R. H., Chesapeake Bay and Tidewater Areas Featured by Museum. Newport News Daily Press, 26 May 1957. Opening and description of Chesapeake Bay Room in the Mariners' Museum.

FARR, GRAHAME, The British Shiplovers' Society, 1931-1956, 28 pp. 2s 6d. Bristol, The Society, 1957.

JONES, G. P., The 'C. A. Thayer' Goes Home. S. S. Summer. Three-masted schooner, built 1895 for lumber trade, sailed down from Puget Sound to take place in San Francisco Maritime Museum.

MARYLAND HISTORICAL SOCIETY, The Marion V. Brewington Chesapeake Bay Collection, 16 pp. 50 cents. Baltimore, The Society, 1957. Description of its half models, carved work, tools, hard-ware, etc.

Mystic Seaport, 10 pp. USNIP, April. Pictorial Section.

PAGET-TOMLINSON, E. W., Liverpool's Shipping Collection, 10 pp. Sea Breezes, Dec. The City of Liverpool has 'one of the finest collections of merchant ship models' in England. Numerous illustrations.

ROBINSON, M. S., Van de Velde Drawings: A Catalogue of Drawings in the National Maritime Museum made by the Elder & the Younger Willem Van de Velde, 451 pp. \$40.00. Cambridge University Press, for the National Maritime Museum. One of the most ambitious and best-executed collections of marine art, with a wealth of pictures of Dutch naval and merchant vessels.

SILIGMANN, H. J., Bachelor of Maine: Winslow Homer, 4 pp. Down East, Jan.

XV. Bibliographies

(Braynard, F. O.), Tanker Bibliography. American Merchant Marine Inst. Bulletin, 21 March, 4 April, 9 May.

LANGDON, R. M., Notable Naval Books of 1957, 11 pp. USNIP, Dec.

XVI. Annuals

BLACKMAN, RAYMOND, ed., Jane's Fighting Ships, 1957-1058, 59th Edition, 560 pp. \$30.00. New York, McGraw-Hill.

THURSEIFLD, H. G., RN, Brassey's Annual: The Armed Forces Year Book, 1957, 451 pp. \$9.50. New York, Macmillan. Ch. 3. Sir Gerald Dickens, The Commonwealth & Sea Power; Ch. 8. B. Schofield, Foreign Navies; Ch. 11, Cyril Falls, Operation Musketeer (Port Said); Ch. 14, C. G. Forsberg, Naval Salvage Organisation; Ch. 19, P. W. Brock, The Royal Navy in Germany, 1945-47; J. R. Gordon-Finlayson, Defence Problems of Aden; Navy Estimates, 1957-58.

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